

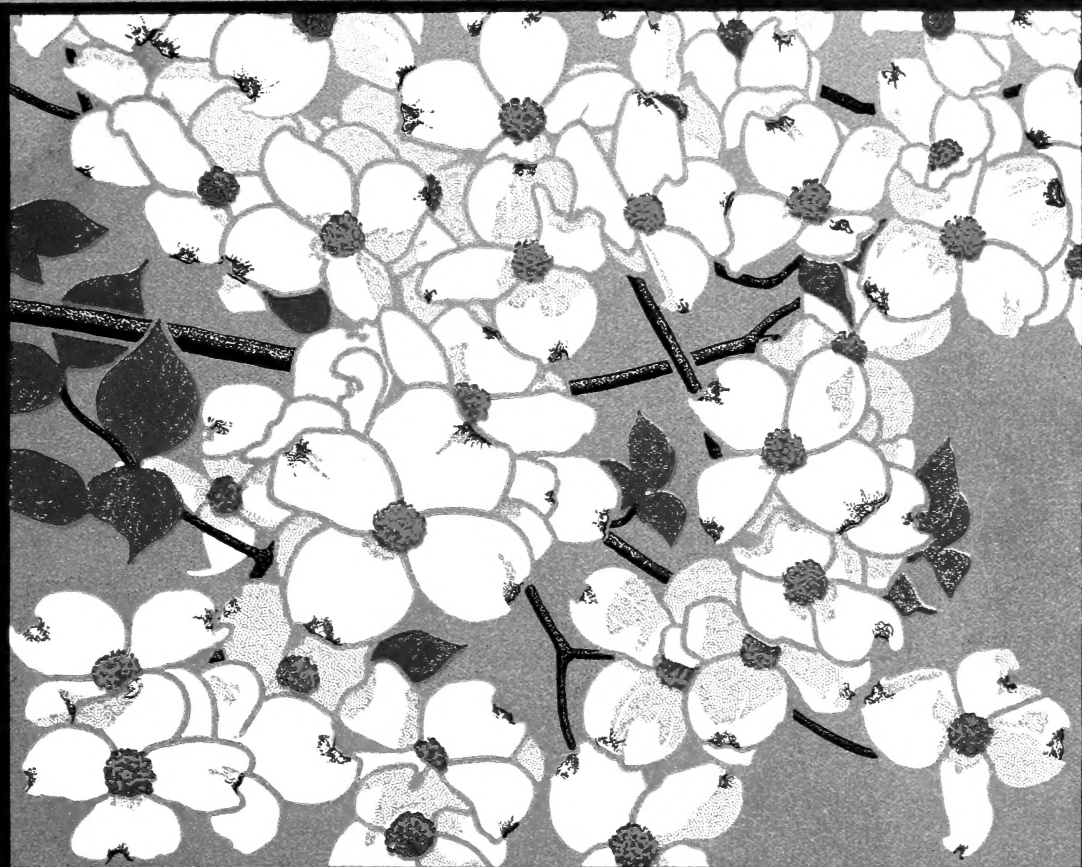
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6261- 1912

TREES FOR LONG ISLAND

U.S. Department of Agriculture
L. B. RAY
Washington, D. C.



HICKS NURSERIES
ISAAC HICKS AND SON
Westbury, Nassau Co., N.Y.

Preface

THE HICKS NURSERIES CAN HELP YOU IN SEVERAL DISTINCT WAYS

- 1st. By supplying big trees, twenty to fifty years old, in addition to the usual nursery sizes, four to eight years old.
- 2nd. By supplying little trees, one to four years old, by the thousand at low rates.
- 3rd. By supplying native trees and shrubs, because they are the most healthy and beautiful.
- 4th. By urging you to avoid foreign plants, if there is a native species fulfilling the same purpose.
- 5th. By discouraging "freaks," such as variegated foliage, purple foliage, and abnormal weeping trees.

It will pay anyone contemplating landscape planting in the region between Virginia, Illinois and Maine, to investigate our stock. Our methods of moving large trees are applicable all over the world.

A study of this catalogue will give some points in selecting trees to permanently fit your conditions, growing them most satisfactorily, arranging them to solve your landscape problems, or tell how you can move in wild trees and shrubs from your neighborhood. We will take pleasure in helping you reach the best results whether you purchase or not.

The best way is to come to the nurseries, study the various plants, and consider how they can solve your problem. If a visit is impracticable, a study of our Price-List, a separate publication, will show accurately the stock offered, describing its height, spread, diameter of trunk, and price.

Location. The office is on the Jericho Turnpike, easily reached by automobile, twenty-two miles from the Queensboro Bridge. There is a ferry from Rye, Westchester County, N. Y., to Sea Cliff, Long Island, during the summer months. Sea Cliff is eight miles north of Westbury.

Westbury is a station on the main line of the Long Island Railroad. Auto-hacks waiting at all trains. Westbury has twenty-four trains per day. Mineola, three miles to the west, has forty-four trains per day. The Mineola-Hicksville Trolley Line passes the nurseries, two-thirds of a mile from the office, and connects with Roslyn, Port Washington, Flushing, Garden City, Hempstead, Freeport, Rockville Center, Hyde Park, Jamaica, and other villages.

CALENDAR OF THE YEAR'S PLANTING AND OTHER WORK

"When is the best time to plant?" This is usually the first question asked; it should be the last. What to plant and how to plant are more important. The following calendar and catalogue will help you to determine both.

Spring. From early March when the frost is leaving the ground, to the middle of May, when the foliage is appearing, is suitable for all kinds of planting. Do not, however, limit your planting to this season to the detriment of the development of your grounds. This is the season when you and the nurserymen are most busy. Should you receive stock after the leaves begin to appear, it will grow if cut back and kept damp.

June and July are the months when plants are growing most vigorously, and there is but little transplanting. This is the season when a careful study will enable you to realize the needs of your place, and plan for the desired improvements. Take note of the trees and plants you see, come to the nurseries to select the stock while in full leaf and flower, rather than in the fall when so few plants are in flower and the foliage is less fresh and brilliant.

Water and mulch newly planted stock from May to September. Prune shrubs after flowering.

August and September are months in which all evergreens can be planted with excellent success. We transplant hundreds of thousands, from little seedlings three months old to trees 60 feet high, beginning about July 20. Send for Hicks' "Evergreens for August and September Planting."

October to December 15 is the fall planting season for nearly all kinds of deciduous trees, shrubs, roses, vines, fruits and hardy flowers. It is the time to get the best selections from the nurseries, and to do the work of planting most carefully. There are a few species liable to have the twigs dry out when planted in the fall. These we wrap with straw or defer planting till spring. We continue during the fall, moving large evergreens 6 to 60 feet high, with balls of earth.

December to March is the winter season for transplanting large evergreens. The ground seldom freezes deeply on Long Island. If mulched with straw, litter or leaves, the ground may be broken through, at small expense. This method gives employment to men and teams that would otherwise be idle. Deciduous trees may be transplanted at any time through the winter on mild days, provided the ground is not frozen more than 4 inches deep. Heavy mulching to keep out the frost at both the tree and planting sites permits work nearly all winter. Send for "Planting Large Evergreens in Winter."

Spray for San José Scale, and plan the year's campaign of spraying. Prune trees and shrubs.

BUSINESS TERMS

We Charge for Delivery, and Packing for Shipment. It is the only equitable method, because much of the stock is delivered by wagon or customers call for it. If all of our stock were of the usual small sizes packed for shipment, the packing would be a comparatively small item, and could be included in the price; but, as some of the large trees are difficult and expensive to pack, it would not be equitable to make the price include packing. In delivery, frequently three twenty-year-old trees can be delivered and planted with the same men and teams as one tree. We often combine several orders in one trip, thus reducing the expense, which is charged approximately pro rata.

Therefore, our prices, unless otherwise specified, are for stock dug and loaded at the nurseries. Charge is made for packing in boxes, bales or crates. Delivery to the railroad, where our responsibility ceases, is free. The prices on large trees from the nurseries are either for stock loaded at the nurseries, or including delivery and planting. This amount varies according to the movers used and the distance, and the assistance rendered by the purchaser.

Terms of Payment. Net Cash. Unknown correspondents should send satisfactory references, or cash with the order; a bill for the packing will be sent after shipment. Money orders may be obtained for Westbury, Nassau County, New York.

We Desire That Our Customers be Fully Satisfied. We should be promptly notified of any errors that they may be rectified the same season. Unlike manufactured articles, plants cannot be made all alike, and they are not complete at the time of purchase. Transplanting is a severe shock, and it takes time and care to re-establish them. See page 102, Large Tree Department, and "How to Plant and Care for a Tree," on third cover page.

True to Name. We guarantee our stock true to label, and will replace any that proves otherwise. Late in the season, we may be out of some varieties of fruit and other trees, and will substitute similar varieties and sizes unless otherwise directed. It is well to mention alternate varieties in your order.

Guarantee. The living of trees is largely dependent on pruning, planting, cultivating, rain and watering—conditions beyond the nurseryman's control. If you wish your trees guaranteed, please so state when asking prices. We inspect much of the stock sold, and replace some which has failed or is in poor condition. Our doing this does not constitute a guarantee. It is manifestly impracticable to inspect all the stock. Take good care of your stock, and you will have little occasion for replacing.



What may be done with three or four large trees from the vicinity or from our nurseries. On the right, the first tree is a Silver Maple from our nurseries, moved when about eight inches in diameter. The tree nearest the house is a Norway Maple, moved when about eleven inches in diameter. On the left is a Sugar Maple of similar size. Residence of Mr. D. A. Loring, Locust Valley, Long Island.

Trees for Long Island

DESCRIPTIVE CATALOGUE OF HICKS NURSERIES

Edition, 1912

ISAAC HICKS & SON

EDWARD HICKS

HENRY HICKS

Westbury, Nassau Co., Long Island, N. Y.

Telephone, 68 Westbury

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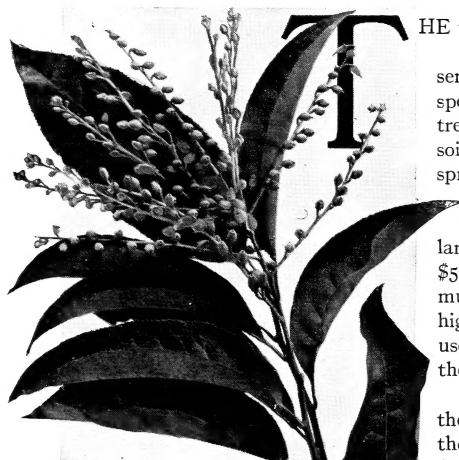
Norway Maple photographed two or three years after it was planted from our Nurseries; 6 inches in diameter, 20 feet high, 10 feet spread. Residence of Mr. L. A. Thompson, Glen Cove, Long Island



Block of Norway Maples in our nurseries. These trees are sixteen to twenty years old, 6 to 9 inches in diameter, 22 to 28 feet high, 10 to 15 feet spread of branches. We have 300 of them. They are in the best possible condition for making rapid growth after transplanting. The tops have been pruned to make them broad and symmetrical.

Instead of looking for large trees to be moved in from your vicinity, it may be cheaper and easier to plant two or three times as many of these trees by planting several in a group instead of one large tree.

Deciduous Trees



A spray of *Andromeda* buds

THE term deciduous is applied to trees the leaves of which fall in autumn.

To select trees, the first question is, what is the purpose the trees are to serve? Shade for the house, path or avenue; landscape planting as single specimens or in groups, screens for undesirable objects, etc.? Second, what trees will suit the soil and climate for the best permanent results,—is the soil damp or dry, sandy or loamy? Is the situation inland or exposed to salt spray? If quick-growing trees are used, for which the soil is not damp enough, which will be the least unsightly as they grow older? Third, what kind of trees are available? What sizes of trees are wanted? Are large trees needed? Will trees 20 years old, 25 feet high, 12 feet spread, at \$50, answer the purpose, or are larger trees needed at two or three times as much? Where can trees of the ordinary size, 1½ inches in diameter, 10 feet high, at \$2 be used? Where may little trees 2 feet high, at 10 cents, be used? Fourth, how and when may they be planted and cared for to give the best results?

Deciduous trees are planted when the leaves are off, from September to the middle of December or later, if the ground is not frozen deeply, and in the spring as soon as the frost is gone, from March first to tenth, to May first to tenth, when the foliage is out.

The best way to settle these questions is to visit the nurseries, study the different trees, and have your selections labeled. You can study the trees in all sizes and ages, and see hundreds of examples of successful transplanting of large trees.

ANDROMEDA • Sorrel Tree

Arborea. As good as the Dogwood, it would be nearly as popular if its flowers were as showy. They are like the Lily-of-the-Valley and borne in July. We have an unusually good stock of *Andromeda*, both in bush form and as trees 10 feet high.

Have you a border of shrubs to lift out of the commonplace, a shady place to brighten up, a place for a choice little tree or big shrub? Then consider this charming tree.

ASH • *Fraxinus*

White. *F. Americana*. A vigorous, up-standing tree, like the Sugar Maple and Tulip Tree in form. Ours are straight, vigorous trees which could be used for street planting, preferably on the north side of Long Island.

APPLE, FLOWERING *Pyrus*; *Malus*

Bechtel's Double-flowering Crab. *P. Ioensis*, var. *Bechteli*. A small tree which is a delight to look upon when it is covered in May with fragrant double pink blossoms like miniature *Hermosa* roses.

Flowering Crab, syn., *P. Malus floribunda*. This variety is very floriferous and showy. The flowers change from deep rose in the bud to pure white. Small, red, cherry-like fruit.

Parkman's Flowering Crab. *P. Halliana*; syn., *P. Parkmani*; *Malus Halliana*. The beautiful red pendent blossoms, borne in wonderful profusion, distinguish this from the other Flowering Crabs.



BEECH • *Fagus*

Nobody finds any fault with the Beech at any stage of its growth. It grows as rapidly as the Norway or Sugar Maples. The only trouble has been that nurserymen had but few of them, and a large per cent died in transplanting; the balance grew slowly for two years.

We have overcome these difficulties. There is a theory that the roots of a fungus work in partnership with the Beech roots to get food from the soil. This may be the reason why moving Beeches with a ball of earth is more successful. Ours are root-pruned for moving this way. If moved without a ball of earth, Beeches need very severe pruning, reducing the number of buds 90 per cent. The writer rarely sees a Beech pruned for transplanting without wanting to prune it more.

A Beech will start out in full leaf in May, but make very few new roots. In July, after a few days of drought, the leaves will fall and the tree will not recover. On the other hand, a Maple, Elm or Willow will make new roots in May and June, and if the leaves do fall in July they can start again after the first rain. Perhaps the reason is that the wood of the Beech is close-grained and the sap circulates slowly. These remarks apply with equal force to the Oaks. You know the Oaks and Beeches are among the best trees; we will do all we can to make them succeed, but you should do your share in close pruning, watering and mulching for the first two years. Then you will have trees of which you may be proud.

American. *F. ferruginea*. Apart from its beauty of form and foliage, there is that about its smooth, gray bark which gives one the feeling of wondrous strength in repose. We have a magnificent stock of sturdy, broad trees, 6, 8, and 10 feet high. These are branched to the ground, but have single leaders so that you can trim them up for shade trees.

English, or European. *F. sylvatica*. This is one of the few European trees that seem perfectly at home here, the foliage never being damaged by insects or fungi. It promises to be just as long-lived as any of our native trees. Its foliage is darker green in the summer and darker brown in the winter than the American Beech. If you want proof that it is a rapid-growing tree, look at those on the north side of the turnpike opposite our nursery, planted about 30 years ago. They are 50 feet high, 40 feet spread, and 22 inches diameter.

Their most important use, however, is in boundary plantations where their low branches, retaining the russet foliage all the year, make a screen far more dignified than the usual mixed shrubbery. A grove of Beech, Oak, Pine and Hemlock will give pleasure now, and 200 years from now be a monument to its designer. If you have a border of large shrubbery put in some of these handsome trees.

Rivers' Purple. *F. sylvatica*, var. *purpurea* *Riversii*. This is the best purple tree. It has large foliage of black-purple or reddish color which is very striking in May and June, and changes to a dark green in July and August. This variety has the brightest color and holds it the longest. When young, the tree is rather open and graceful in growth. It will probably be one of the last of the abnormally colored trees to go out of favor. The Copper Beech is nearly the same in color, but has smaller leaves and is a considerably denser tree.

European Weeping. *F. sylvatica*, var. *pendula*. When young it is an upright fountain-like tree with straight trunk and branches waving downward. When old, it is like a great tent, but cool and dim. No more restful and refreshing place can be imagined than an arbor formed by one of these unique trees.

Fern-leaved. *F. sylvatica*, var. *heterophylla*. A tree worthy of a place in most large plantings, and which will never become commonplace. It is as valuable decorating out-of-doors as the maidenhair fern is in the conservatory.

Its lights and shadows are always pleasing to the eye, and its spirited outline adds a touch of vivacity to the composition without being inharmonious.



English Beech. In the foreground, Fern-leaved Beech. These both make broad, low-branched specimens. With our tree-moving apparatus, we have thinned out some of this group to prevent crowding.

On the left, the ground drops off sharply, but it is built up by a thick border of shrubbery, the front row being Japanese Barberry, and back of it, the Laburnum. Here are the two types of low foliage planting—low-foliaged trees and masses of shrubs.

Entrance drive to the residence of Mr. Charles Steele, Westbury, Long Island.



TREES FOR LONG ISLAND



DECIDUOUS TREES



White Birch in the front of a group of evergreens; Colorado Blue Spruce on the right. We planted these trees about fifteen years ago to prepare the ground as a residence site. The use of small nursery stock in this way is an excellent investment on land otherwise idle.

BIRCH · Betula

European White. *B. alba*. This Birch will always be a favorite tree. A few White Birches are being killed by the bronze birch-borer. Cut and burn before the borers come out. See Bulletin No. 234, Cornell Agricultural Experimental Station.

Canoe, or Paper. *B. papyrifera*. This is the big, sturdy tree you see in the Catskills and northward, with large, triangular leaves.

Gray, or White. *B. populifolia*. This is the commonest White Birch, and the only one native to Long Island. It usually grows up with a cluster of stems, but it can, however, be grown as a single-trunked tree. We advise its extensive use for mass planting with Pines on poor soils. These three are all the White Birches commonly known, and they are practically alike in their general effect. Many landscapes may be improved by a cluster of White Birches against a shadowy corner of the woodland, or against a clump of Pine, Hemlock or Cedar.

Cherry, Sweet or Black. *B. lenta*. This is a native tree, reaching large size on the north side of Long Island. In landscape planting it is chiefly valuable as a filler. The bark is aromatic.

Yellow. Similar in all respects to the Cherry, but the bark is not so dark.

CATALPA

We have several big Catalpas which we will sell very cheaply to clear the land, as we need it for smaller stock. They are offered at less than it has cost to grow them. Catalpas have no drawbacks, insects or fungous diseases. The only criticism that the most severe judge of trees can make, is that the leaves are large and that they come out in foliage two weeks later than other trees.

CATALPA, continued

In June it is the showiest of all flowering trees, with great panicles of white flowers. These trees are suitable for making a grove where a large amount of foliage is wanted at a moderate cost. They may be planted as shade trees near a new house, as ornamental trees on the lawn, or for screens. These trees are of excellent quality, the tops having been cut back to make them more dense and symmetrical.

Bungei. *C. bignonioides*, var. *nana*. See plants for Formal Garden, page 81.

CHERRY · Prunus

Japanese Double-flowering. *P. Pseudo-Cerasus*. The blooming of the Cherry is a national festival with the Japanese. They have dozens of varieties, some fully as beautiful as our roses. Collections of these varieties have been presented by the Japanese Government for planting in the parks of Washington and New York. Some day they will become popular in this country, for like many trees from Eastern Asia, they are quite at home in this climate, thriving and blooming with as much vigor and freedom as in their own.



Catalpa tree in bloom in our nursery. Large clusters of white flowers are followed by slender, cylindrical pods one foot long. Some of the western railroads have profitably planted the Catalpa for ties.



DECIDUOUS TREES



Wild Cherry and Pitch Pine near the sea, planted for Mr. G. Warrington Curtis, Southampton, Long Island. One of the local residents said, "You can't get trees to grow here; it is too near the ocean; it is south of the dead line." The owner pointed to the Indian Reservation, where there was a remainder of the woodland equally near the sea, and he admitted that he had never noticed it. Just because it is said that the trees cannot be grown, many seaside residences are bleak and uninteresting. The right way is to follow nature,—plant in thick groups, the foliage thick at the ground and coming up gradually away from the sea. In this illustration the foliage has been cut away for the view.

Planting was done by a crew of our men and tree-movers in December, collecting the Wild Cherry along the fence-rows. At other parts of the grounds larger trees were used. The Pitch Pines are part of several car-loads of Cedar and Pine which had been brought to the nurseries from the wild, grown a few years and sold. On other parts of the grounds, Bayberry bushes, Inkberry and other native plants were collected from the vicinity, and planted in dense groups. Another winter, a crew of our men and several tree-movers transplanted twenty-five Apple trees of about 25 feet spread. The ground does not freeze deeply near the sea. With a little mulching, work can continue all winter. The planting has been well cared for and has thrived excellently. The points to remember are: It is practical and economical to plant large trees near the seashore, to develop the landscape from native material, and to work all winter using local men and teams, with a few expert men and the proper apparatus.

CERRY, continued

Weeping Japanese. *P. pendula*. This blooms very early in the spring, even ahead of our Peaches and Plums, and the first Violets. It makes a little tree of widely waving branches, so slender that they do not appear to support the pink veil of blossoms that float in the April air.

Wild. *P. serotina*. This is the despised weed of the hedge-rows, crowding out over the fields and having tent-caterpillar and black-knot. It is the best quick-growing tree for seaside planting, and should be used not only as a tree, but also particularly in the thick mass-plantings of trees and shrubs, which should always be used in seaside conditions. We offer excellent stock for this purpose, which will grow quickly. We have moved large trees spreading 30 feet, to plant on bare, wind-swept seaside lawns, with very satisfactory results, as they keep good foliage in situations where other foliage is occasionally damaged. Black-knot is not serious on this species. Tent-caterpillar does not occur every year, and is quickly destroyed with a kerosene torch.

If we were to pick out trees to keep good foliage on the most sandy and drought-stricken portions of Long Island, as on parts of the Hempstead Plains, we would use Wild Cherry for the quick effects and mix in Oaks, as they make more dignified old trees. Major C. T. Barrett was the first to use it extensively in landscape planting. He used it for both mass-planting and avenues on the Far Rock-away gravel soil near the ocean.

CHESTNUT • Castanea

Japanese. *C. crenata*. This is nearly immune to the Chestnut disease and therefore may continue to be planted both for the fruit and for its excellent landscape qualities.

CHINESE CORK TREE

Phellodendron amurense

This promises to be a valuable tree. It is not injured by insects or drought. It makes a broad tree very quickly.



Chinese Cork Tree (*Phellodendron*). View on the lawn of the late Charles G. Peters, Westbury, Long Island.

This, the *Cedrella* and the *Ailanthus*, all came from China and have similar insect- and fungus-resisting foliage. The *Ailanthus* has come into disfavor because the pollen-bearing trees (not the seed-bearing ones) have a disagreeable odor when in bloom and, in some circumstances, the trees send up numerous suckers. However, its foliage stands the best under city conditions, and is excellent at the seashore. We should be glad to give away plants of the *Phellodendron* and *Cedrella* to those having an opportunity to test their resistance to smoke and salt-spray.



Drive on the grounds of Mr. John T. Pratt, Glen Cove, Long Island. Apparently, this was a farm lane bordered by tall Locusts, and, about twenty years ago, Dogwoods were planted in front of them

DOGWOOD • *Cornus*

White-flowering. *C. florida*. Progress has been made in utilizing our native trees. In "Trees of America," published 1855, an eminent Belgian collector said to an American traveler, after speaking of the difficulty he had in obtaining our native plants and trees: "And so, in a country of Azaleas, Kalmias, Rhododendrons, Cypripediums, Magnolias, and Nyssas, the loveliest flowers, shrubs and trees of temperate climates, you never put them in your gardens, but send over the water, every year, for thousands of dollars' worth of English Larches and Dutch Hyacinths. 'Voilà le gout républicain!' (Behold the taste of republicans!)" The Dogwood is now extensively planted. In early May, before the leaves appear, it illuminates the woodland with white blossoms, floating like butterflies through the darker parts of the forests, or on the edges massed in horizontal strata, white as snow or tinged with pink. In September its brilliant red berries feed the robins on their south-bound journey. A week or two later the foliage turns with the first Sumach and Woodbine. It is a tree without an enemy or a critic. In landscape planting it is properly used as a small specimen tree, mass-planting with shrubs, undergrowth and boundary to tall Pines, Hemlocks and Oaks. It is one of the easiest wild trees to transplant and can easily be dug up in the forest, for the roots are just below the surface, and it is sure to grow if the top is cut back. We have advised many people to collect their own Dogwoods, and it is very discouraging to see many of them fail because they neglect pruning. The best trees to collect, of course, are those growing in the open, usually in abandoned fields, where they are springing up with Locust, Cedars and Oaks.

Red-flowering. *C. florida*, var. *rubra*. The flowers are just as freely borne as the white form, but are of a bright pink or red color. A most satisfactory way to use this tree is in connection with the white, when the contrast, one with the other, will enhance the beauty of each.

Japanese, *C. Kousa*. This is a tree that harmonizes completely with the flowering Dogwood and extends the season of bloom about one month. It blooms after the

DOGWOOD, continued

foliage comes out to afford it a background. The sepals are long and tapering and not blunt like the flowering Dogwood. Instead of a cluster of red berries, it has a globular berry about $\frac{3}{4}$ of an inch in diameter filled with edible yellow pulp. This tree appeals strongly to those who desire something "different," and will add a most charming variety to the planting.



Japanese Dogwood, (*Cornus Kousa*). This has been grafted on a stem of the *Cornus florida*. Anyone can graft them in the spring or bud them in August along the borders of their woodland, and add a pleasant surprise.



ELM

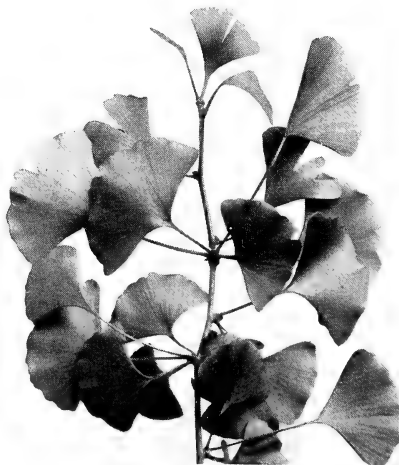
Ulmus

American. *U. Americana.* The American Elm will always be in demand in spite of the elm-leaf beetle. This insect, by the way, is not nearly so bad on the American Elm as upon the English Elm. The way to attack it is not to put bands around the trees, but to spray the trees in May with arsenate of lead. This sticks on the foliage for several months. The bands kill but a very small per cent of the beetles after they have done their damage. The Elm will grow on any part of Long Island, but it develops its fullest beauty on deep or damp soils. Because you have pictured the Elm as the highest type of landscape beauty, do not think it must be the principal tree on your Long Island estate. Remember that the handsome Elms you have seen have been on the mainland, where the rock or clay subsoils hold water near the surface, and contain more mineral plant food than the washed-out Long Island sand.

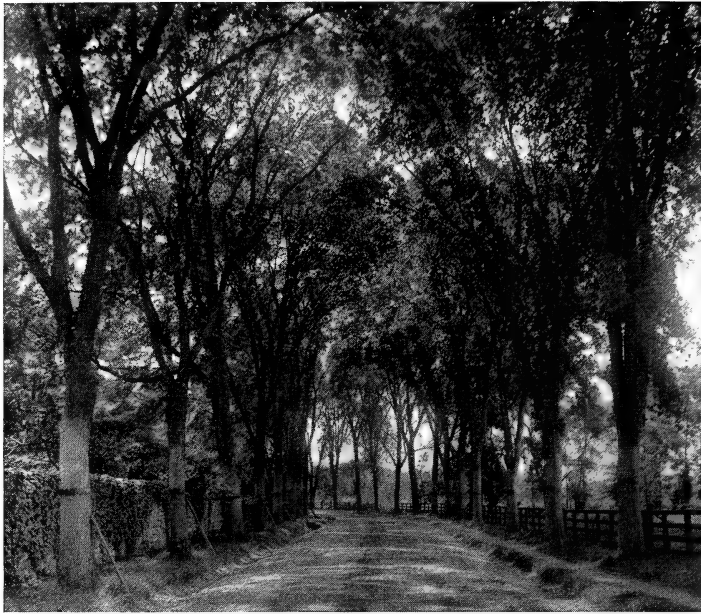
Weeping. *U. Americana*, var. *pendula*. The Lombardy Poplar is frequently recommended because it breaks the monotony of round-headed trees. Here is a tree which will do it in another way. Its slender branches arch out 10 feet from the mass of foliage in a graceful curve against the sky. It makes a tall, broad tree, easy to distinguish from the ordinary Elm by the curve of its branches.

GINKGO Maidenhair Tree

Ginkgo biloba; syn. *Salisburia adiantifolia*. Here is a tree to plant for posterity, for it is slow to get started and, while young, awkward in appearance, with its narrow, ungainly limbs. It has no insect or fungous enemies attacking it in this climate. In this respect it is unique among trees, and also in the care that it takes of itself. We have never seen an old tree with broken branches, rotten stubs or dead bark. It is a tree which gives an air of distinction to the place whether it is used in company with other trees or singly out on the lawn. There is a magnificent avenue of them on the grounds of the Department of Agriculture, Washington, D. C., which always attracts attention. It thrives well on all Long Island soils, preferring a well-drained situation.



Foliage of Ginkgo showing the parallel veins in the leaves different from all other broad-leaved trees, which have netted veins.



Elms on the Wheatley Road adjoining the property of Mr. Robert D. Winthrop. Their perfect foliage in the late summer is a result of spraying with arsenate of lead in May.

HICKORY

Hickoria; syn., *Carya*

Mockernut.

H. tomentosa. This and the White Oak, Scarlet Oak, and Black Oak are the most abundant and the best forest trees on the largest areas of Long Island, that is, both on the hills and the Pitch Pine regions. It was once much more common in the latter, but has been superseded by the Pitch Pine and Scrub Oak, which can come in quickly after fires. We can show Hickory trees growing wild which have grown faster than Norway Maples and Catalpas, planted alongside. This indicates that if

planters only get them started they will be satisfactory trees. Nurserymen have not offered them because of the long tap-roots and the difficulty to make them live. Small Hickories should be included in mixed groups of Oak, Beech and Pine, especially on the Hempstead Plains and regions to the eastward.

Shellbark, or Shagbark. *H. ovata*; syn., *Carya alba*. This has nuts more easily cracked than the former, but is otherwise a similar tree. It is native to Long Island only on damp, clay soil, as at Cedar Swamp, near Glen Head.

Pig Nut. *Carya porcina*. A Hickory partaking of the gracefulness of the Elm. It is a large, full-topped tree, with slender twigs arching downward. There are trees on the road from Old Westbury to Westbury Pond.

Pecan Nut. These are from seeds we obtained from the northern part of its range in Indiana. The southern Pecans are not always hardy.

HORNBEAM • Carpinus

European. *C. Betulus*. Here is an opportunity to get a hedge for service court or flower garden that is different from Privet, and which screens the year round with its russet leaves. We offer plants that have been trimmed to form hedges. It is almost exactly like the Beech hedges, and in Europe both Hornbeam and Beech are largely used. There is no reason why the same custom may not be introduced here. We will be very glad to do all in our power to encourage it, and will cheerfully welcome requests for information.

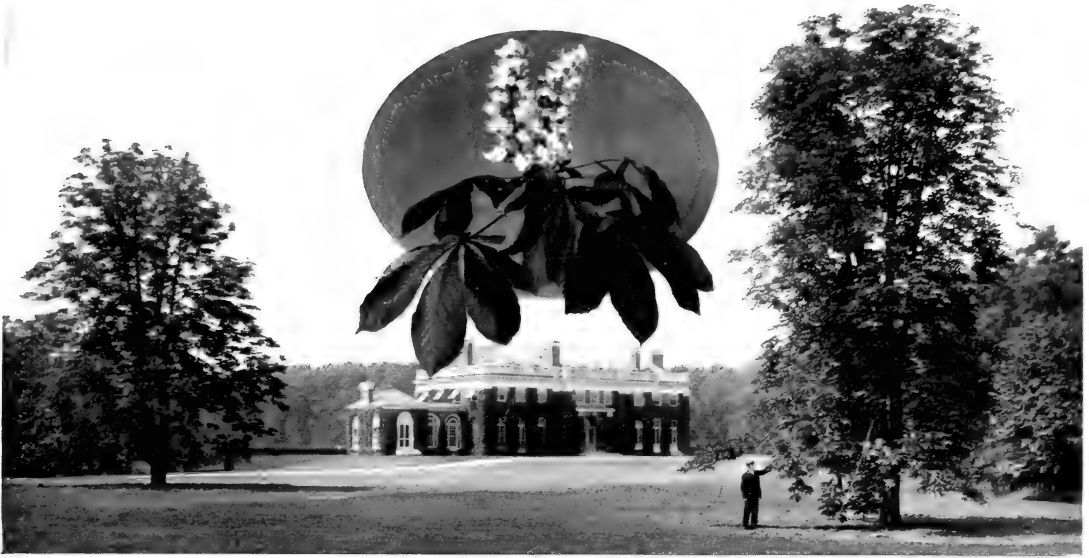
Hornbeam Pyramids and Arches. See Formal Garden Material, page 81.



TREES FOR LONG ISLAND



DECIDUOUS TREES



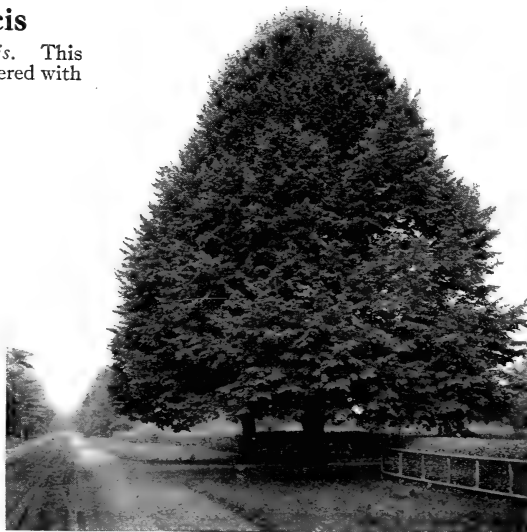
Horse-Chestnut planted by Hicks' tree-mover on the grounds of Mr. James B. Taylor, Jericho, Long Island. The Horse-Chestnut belongs to the Maple family, and is easy to transplant

HORSE-CHESTNUT · *Æsculus*

Æsculus Hippocastanum. This will always be a favorite tree during May, June and early July, when it has the heaviest foliage. In May it is the most beautiful flowering tree. On the north slope of Long Island it usually keeps good foliage, especially on deep soils. On the south slope the foliage may commence to turn brown in July or August, and it should not be depended upon as the principal shade tree. Those so situated, who still want the tree, should plant it in an out-of-sight position, behind other trees where its brown foliage will not remind one of autumn two months ahead. It is a slow-growing tree when young, and therefore should not be depended upon for shade, although it is very dense when fully grown.

JUDAS · *Cercis*

American. *C. Canadensis.* This little tree has its twigs all covered with magenta-pink, pea-shaped blossoms before the foliage appears in May. It rarely makes a good, straight specimen tree, but can be appropriately used in the borders of woodland or at the back of groups of tall shrubs. In Pennsylvania and southward it is native with the Dogwood, and the two trees blooming together are much admired. They form a wonderfully effective picture just about the time the woods are filling with leafage to form background, and even those to whom magenta is very offensive, go into raptures over the beauty of the Judas tree when in full bloom. It has splendid glossy, heart-shaped leaves, and bears interesting brown seed-pods which remain on all winter.



Pair of Silver Lindens on the Jericho Turnpike, opposite the office of the Hicks Nurseries. Their symmetrical, dense outlines are the result of natural growth without pruning.

KÖELREUTERIA · Varnish Tree

Paniculata. A Japanese tree with lemon-yellow flowers in July. It is the only tree to bloom at this time, and makes an interesting note which can be appropriately added to many groups. It is a healthy tree, growing 20 to 30 feet high.

LARCH · *Larix*

European. *L. decidua*; syn., *L. Europæa.* This always wins admiration as a forerunner of spring foliage. Its cheerful green lights the landscape first of all, for it comes in foliage about the 20th of April, at least two weeks before the Maples and Horse-Chestnuts, and three or four weeks before the Oaks. It has a new rival in the Japanese Poplar. The Larch is a tall, graceful tree, resembling the Spruce tree or Fir, for it belongs to the conifer family, but drops its leaves in winter. It should be planted in the fall or before the middle of April.

Japanese Golden.

Pseudo-Larix Kämpferi. syn., *L. Kämpferi.* This resembles the old Cedars of Lebanon, as seen about English castles. Its branches arch and spread widely in the same manner. The reason may be that it is so closely related. The Director of Kew Gardens mentioned a tree in Flushing as being one of the most noteworthy trees he saw when in America. This is perhaps 60 feet high and 40 feet broad, and gives good promise of long life. The name "golden" is given from the clear yellow tints of its autumn foliage.



LINDEN • *Tilia*

The Linden family has a strong hold on the affections, especially with those who admire symmetry rather than picturesqueness in trees. The elliptical curves of the Lindens are always attractive, and make them in demand for avenue planting. The luxuriant, dense growth arching to the lawn makes them good specimen trees.

On Long Island great care should be used in selecting the species and variety of Linden. The American Linden gets rusty in August and September, during some years, on many parts of Long Island. It is, furthermore, not so dark and dense or compact in growth as the other Lindens.

In Europe there have been developed many varieties of the several species. Some of these are quite certain to become rusty in July. Others are so severely attacked that they are defoliated in August.

It is to be regretted that the European nurserymen do not refuse to send here the unsatisfactory varieties. The worst in this respect is the Broad-leaved Linden, *T. plataphylla*, of which we have thrown away many fine specimens. Another, the Yellow-twigged Linden, *T. dasystyla*, while in many ways a handsome tree, does not always thrive here.

Silver. *T. tomentosa*; syn., *T. argentea*; *T. alba*. This species grows with perfect symmetry and an even outline. The foliage is always healthy and retained until late in the season. To those who wish an entrance avenue that is both beautiful and good, we recommend our trees 8 to 16 feet high. The foliage is dark green above and white beneath.

Weeping Silver. *T. petiolaris*; syn., *T. argentea*, var. *pendula*. This is not a weeping tree like the Weeping Willow or Weeping Mulberry, and we think the name is not accurately descriptive and repels. It grows to be as tall as any of the Lindens, and is weeping only at the tips of the twigs for about two feet. One type of landscape planting consists of specimen trees spaced widely enough to develop fully. For such planting this is admirable, and produces a unique effect. Young trees have the bark winter-killed, so we keep them wrapped with straw. On older trees the thick, corky bark prevents winter-killing.



Weeping Silver Linden. An old tree will be like a tent—a charming playground for the children

Spectabilis. *T. tomentosa*, var. *spectabilis*. The origin of this is not decided by botanists. The name means "showy." It is like the Silver Linden, but the leaves are larger and are not white beneath.

Small-leaved European. *T. ulmifolia*; syn., *T. cordata*; *T. microphylla*. This is the most typical Linden. It is an European variety which keeps dense, dark foliage. Its foliage is so small and its twigs so numerous and compact that it exhibits the elliptical outline both winter and summer. We have planted our specimens 12 to 20 feet apart, and offer stock we believe can not be duplicated.

American. *T. Americana*. This is a large, open tree with light green foliage, especially adapted to good soil. The trees, 10 and 12 feet high, are very handsome trees for street planting, and we recommend them for real estate subdivisions, especially where it is desired to have certain streets planted with distinct trees.



Liquidambar, or Sweet Gum. This species maintains its symmetrical character in nearly every individual. Its shining star-shaped foliage keeps in good condition.

LIQUIDAMBAR • Sweet Gum

Liquidambar styraciflua. Now is the time to plant these trees while we offer moderate-sized stock at low prices. They are sturdy, stocky trees, branched out symmetrically. They are sure to take hold and grow rapidly, as this tree grows on all Long Island soils and keeps a straight, single leader with a symmetrical, ovate top like the Lindens or Sugar Maples. It would be just as popular as the Sugar Maple if it had grown as far north. It is even handsomer than the Sugar Maple in the intensity of its bright red, dark crimson and lemon-yellow autumn coloring. It is considered best to transplant the Liquidambar in the spring only. Ours have such good roots that



TREES FOR LONG ISLAND



DECIDUOUS TREES

LIQUIDAMBAR, continued

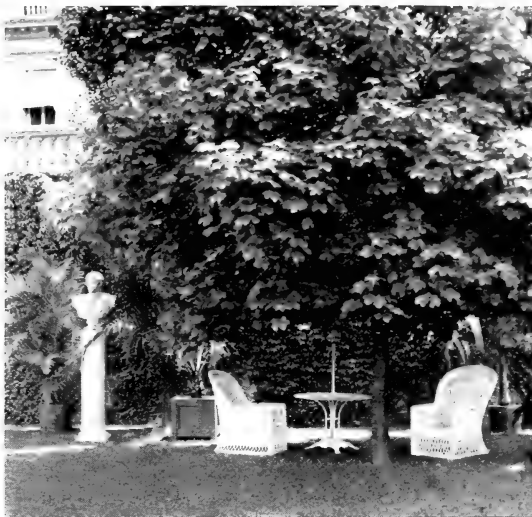
we think there need be little trouble with them. We are determined to make them more popular for street planting. Some may imagine that the Liquidambar demands damp soil because it is native to such places. It will tolerate damp soil, but if planted elsewhere thrives excellently, as may be seen at Garden City north of St. Mary's School, where old trees are as large as the best Maples and much handsomer. Our stock is from seed collected on Long Island, which is about the northern limit of its range. We had 500 from a nursery a few hundred miles to the south, but had to throw them out because they killed to the ground for two winters.

LOCUST

Yellow. *Robinia Pseudacacia*. It is the most commonly planted forest tree on Long Island. In fact, Long Island probably had the first planted forests on the western hemisphere. In colonial days, no farm was considered complete without its grove of Locusts. It was introduced on Long Island by Capt. Sands of Sands Point, Port Washington, who brought it from Virginia, where it is native.

We can supply trees on our tree-movers up to 70 feet in height. They make one of the best and cheapest trees for planting in groups.

Honey. *Gleditsia triacanthos*. This is an excellent seaside tree, as the small, tough leaves are uninjured by wind or salt. On the Rockaway peninsula, even on poor soils, it makes one of the largest trees, arching high above the houses like an elm. This species may be identified by its black bark and clusters of spines one foot long on most old trees. Will make an impenetrable hedge and is often used for that purpose on farms.



View on the terrace at the residence of Mr. W. D. Guthrie, Locust Valley, Long Island, showing one of our large Norway Maples a few years after planting from the nurseries. Our stock of trees, 25 feet high, save ten to fifteen years.

MAACKIA

Amurensis. This is closely related to the Yellow-Wood. It makes a neat little tree, with graceful pinnate foliage and clusters of yellow flowers in August



Group of Locust and Wild Cherry planted by our tree-movers from the adjacent hedge-rows. One side of the entrance court was against the woodland, and this group was planted to balance the composition. View of the grounds of Mr. Middleton S. Burrill, Jericho, Long Island. In transplanting large trees, it does not necessarily mean planting broad, single specimens. A greater mass of foliage can be secured for less expense by taking several slender, tall trees, as the Locusts, and feathering down with Wild Cherry. Utilizing the local material is often the greatest economy and the most harmonious.



MAGNOLIAS



Umbrella Magnolia. This stem with a whorl of great leaves is like an umbrella

Sweet Bay. *M. glauca*. This splendid tree might almost be classified as a broad-leaved evergreen—in fact it is a small edition of the southern evergreen Magnolia, which many people ask about, but which is not hardy here. The Sweet Bay is native on Long Island, at West Hampton. In New Jersey it is quite common, and from there come the street venders' supply of cut-flowers in June. The flowers are a cream-colored cup about 3 inches across, and appear for several weeks. The tree retains some of its leaves in winter, and the foliage keeps bright green like the holly.

For all flowering trees, the Magnolias take the lead. They have the largest and most showy flowers. The foliage of all the species is healthy on Long Island.

Magnolias have been rare heretofore because they were high priced, and nurserymen kept but few on hand.

They have been considered difficult to transplant, but we keep our stock root-pruned and move them with a ball of earth, so that they can be transplanted with as much certainty as other trees.

The trees of the Magnolia family are of two classes, those with leaves of ordinary size, as *Acuminata* and *Kobus*, which permits their general planting with Lindens, Maples and Tulip trees. The other class, as the Umbrella, Large-leaved *Fraser's* and *Hypoleuca* Magnolias, have immense tropical foliage 1½ to 2 feet long which indicates that they be planted among groups of rare trees, and to make special features on portions of the ground. For instance, a group of them may be planted along a border of the swamps which frequently cut through the large estates on both shores of Long Island.

The remainder are classed as shrubs. They all have excellent foliage and make rounded masses when planted in groups of shrubs or, better, as single specimens.

Umbrella. *M. tripetala*. We are overstocked with these and yet have not allowed the plants to crowd, and have not neglected root-pruning. You will notice, however, the price is very low for such large, handsome trees. The flowers of this species are about 8 inches long and appear in June after the foliage. The heavy, tropical foliage is torn by the winds and hail-stones when in exposed situations. The most attractive feature is the large carmine fruits about 5 inches long and 2 inches in diameter. These open, and crimson seeds hang out on white silken threads, a most attractive invitation to the birds.



Magnolia stellata, or Hall's Star Magnolia, on the corner of Cathedral avenue and Sixth street, Garden City, Long Island. This property contains excellent old specimens of Asiatic Magnolias. These Magnolias are on the east boundary of the plot. On the south boundary, next to the residence of the Dean, Magnolia *Lennei*. West of the house is a group of *Magnolia Yulan*. They were probably planted about thirty-five years ago.



TREES FOR LONG ISLAND



DECIDUOUS TREES

MAGNOLIA, continued

Large-leaved. *M. macrophylla*. We doubt if there is another stock in the country, or even in Europe, of as good quality as ours. These are all seedlings from our old tree, which has spread 25 feet wide, proving its hardiness in this climate, although it is native in the South. The flowers will open 14 inches wide, as shown in the illustration. The petals are like delicate porcelain in effect. It always attracts favorable attention and admiration. The fragrance, however, is too strong to permit its use as a cut-flower in the house.

Fraser's. *M. Fraseri*. This closely resembles the Umbrella Magnolia, but has brighter red and smaller fruits. The foliage is very large and of a deep, rich green, affording a most effective contrast when the tree is planted in company with the more common trees, such as Maples, Oaks, Hickories, etc. The dark green of its foliage forms a splendid foil for its large, white flowers which are produced about the middle of June.

Cucumber. *M. acuminata*. If you know the Tulip tree, transfer your admiration to this Magnolia, and it will fit accurately. It is even more symmetrical than the Tulip tree, resembling some of the handsomest Lindens. It thrives excellently. The little, green, cucumber-like fruits turn to brilliant red in September. The yellowish green flowers are inconspicuous.

Yulan; syn., *M. conspicua*. This is one parent of the various hybrid Magnolias which bloom before the foliage appears. It has pure white, cup-shaped blossoms early in April, blooming with the *Magnolia stellata* and just before the various pink varieties. Frequently the cups are filled by the last snow. It is a rare and high-priced tree because it has to be grafted by approach, that is, two plants are planted side by side and their branches tied together. After they have united, the roots on one side are cut off.

Soulangeana. This resembles the last, but the outside of the cup is touched with pink. It will make a large, globular shrub 20 feet high and equally broad. It is the most commonly planted of this class of Magnolias.

Purple. *M. obovata gracilis*; syn., *M. purpurea gracilis*. Flowers are dark wine-red and do not open so widely as the others. It blooms a little later in May and frequently has a second crop in August. It is the only Magnolia in our list liable to winter-kill, and this does not happen when planted near the shore.

Lennei. This bears a cup about 4 inches wide and 5 inches high; deep red on the outside and silvery white inside.

Spectiosa. This closely resembles the Soulangeana in form, foliage and flower.

Hall's. *M. stellata*; syn., *M. Halleana*. This is the gem of the floral kingdom for its season. It is the earliest, conspicuous-flowering tree or shrub. The flowers are like great white water-lilies, covering the plant almost like a snow bank. The buds open before any of the other Magnolias, and are covered with snow almost every year. Some seasons it will remain in bloom for three or four weeks. If the first flowers get nipped by frost, another crop appears to continue its beauty. It is a strong, sturdy, oak-like little bush. In summer it is one of the most healthy masses of foliage. The foliage has a distinct landscape quality, quite comparable to that of an old White Oak tree, or a Bayberry bush, that is, the lights and shadows are disposed in rounded or solid masses. It commences to bloom when but 2 feet high. It has a mature appearance when of small size, still it will make a large bush 8 feet high when 10 years old. The largest we have seen is on the terrace of the Department of Agriculture, Washington, D. C. These trees are 20 feet high and about 30 feet wide. It is considered the hardiest of the Magnolias, and we would recommend it where even the Soulangeana may prove tender. Heretofore, these have been scarce and high, the only source of supply being grafted plants imported from Europe. It is a species growing wild in

northern Japan and therefore comes true from seed. Our stock offers an opportunity never before equaled in the nursery trade to secure this plant in quantity at low prices.

Kobus. This is just as compact and symmetrical as the Small-leaved Linden, as straight as the Tulip Tree, with flowers like the *Magnolia stellata*, only there are fewer petals and it does not bloom until 10 feet high, and then only a few scattered blossoms. We have some very handsome specimens which should be used the same as the trees mentioned above in lawn planting.

Hypoleuca. This is a little-known tree, but if planters were acquainted with the noble specimen in the Arboretum of the late Charles A. Dana, Glen Cove, L. I., they would be eager to find a place suitable for it. It thrives with tropical luxuriance, even in unfavorable situations. It



Large-leaved Magnolia. The largest flower outside of the tropics. To get a perfect flower, enclose the bud in a paper bag, to keep away the rose bugs, which become intoxicated and fill the flower cup.

has immense leaves like the Large-leaved Magnolia, but the leaves are tougher and are not damaged by the winds. The flowers are immense cups, 9 inches wide, with thick, cream-colored petals and bright carmine stamens in the center. It will grow to be a tree 30 feet high and equally broad in as many years.

Watsoni, and **Parviflora.** These are the rarest of all the Magnolias and possess a beauty so distinct that nothing else can take their places. Their flowering season adds more than a month to that of the other Magnolias, for they are in bloom from early June to the middle of July. The flowers are like alabaster cups with crimson centers, rivaling the most beautiful orchids. The *Watsoni* is the larger in foliage and flower. Neither of them makes so vigorous a growth as the other Magnolias.



ACER · Maple

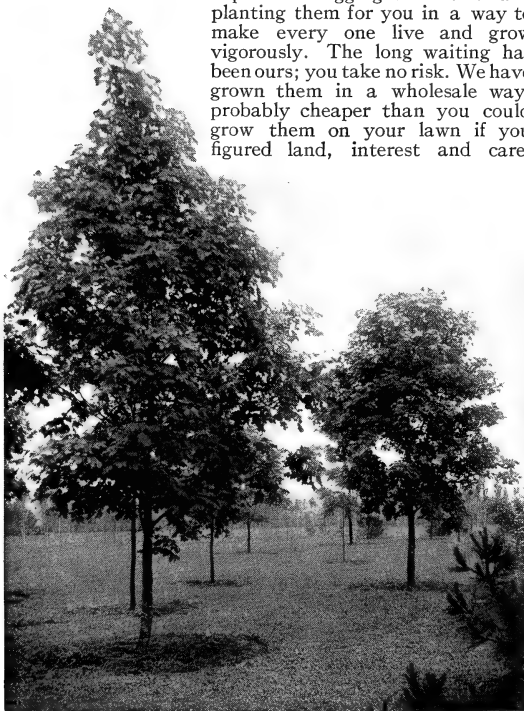


THE members of the Maple family have been favorites with planters ever since the country was first settled. The Sugar Maples supplied the early settlers with sugar, firewood and wood for cabinet-making. They found it transplanted readily from the forests, and so, throughout the northern states, the Sugar Maple and the Elm are the principal landscape features about farms and villages.

The Silver Maple is native to the same area, and grew much more rapidly; consequently it won even greater favor with nurserymen.

The Norway Maple could readily be imported. It made a broader tree, giving better shade than the Sugar Maple and probably has been more widely and acceptably planted than any other tree in our region.

Norway. *A. platanoides*. We have 500 Norway Maples 20 to 30 feet high, 5 to 9 inches in diameter, spreading 12 to 22 feet. This is one fact we want you to remember. The demand for shade and masses of green foliage is universal. The demand to save time is equally so. This stock supplies it. It is a result of 20 years' foresight, enthusiasm, willingness to risk capital and land in growing stock for which there had not been previously a willingness to pay a profitable price, and also willingness to defer profits for a longer period than in almost any other line of business. We have kept rather quiet about it, but now the stock is ready, our land full and the trees are offered to you at a fair price and in excellent quality. The pictures show that we spare neither skill, time nor expense in digging these trees and planting them for you in a way to make every one live and grow vigorously. The long waiting has been ours; you take no risk. We have grown them in a wholesale way, probably cheaper than you could grow them on your lawn if you figured land, interest and care.



Maples 4½ inches in diameter, second year after planting from our nurseries. The foliage shows but little check from moving because the surface of the ground is mulched with manure and the trees are well watered, pipes having been laid to all parts of the ground.

This statement refers to trees near the house and on the entrance drive and immediate lawn. It does not refer to a distant hillside where immediate effect is not essential, and where you can plant a five-cent tree and grow it more cheaply than any nurseryman. No other stock in this country or in Europe can compare with ours, and yet our prices are not high. In good Norway Maples, 2 inches in diameter, the stock on the market is low, and if you are making a real estate subdivision and want a thousand, we cannot supply them. We do believe, however, that a few of these large trees twenty years old, placed on some of the lots, will make a sale at a big profit above the cost of the tree. We know this from the many complaints from those who have bought bare lots, and letters stating that people will buy if assured that big trees can be successfully planted. Do not let distance prevent you from having these big trees. They are easily packed, one to three trees in a bale of straw with damp moss on the roots. They can stand a railroad journey of two weeks without injury. This is one reason we went into raising Norway Maples of large size. They are good trees that transplant readily, whereas large Carolina Poplars transplant more readily and are cheaper, but they are not good trees. Architects should consider these for formal planting on avenues to arch over a path. They have been trimmed to uniform, symmetrical size and will produce a result which, in Europe, would take fifteen years. The Europeans are willing to wait; we are not.

Schwedler's Purple Norway. *A. platanoides*, var. *Schwedleri*. This is most closely like the Purple Beech, but it grows more rapidly. The color is a dark red in May and June, changing to a dark green in late summer.

Reitenbach's Purple Norway. *A. platanoides*, var. *Reitenbachii*. This variety resembles Schwedler's, but it is purple during August and September.

Sugar, Rock, or Hard. *A. saccharum*; syn., *A. saccharinum*. This is a taller-growing tree than the Norway, with a narrower head. It is particularly good on the north slope of Long Island and on the mainland. The Norway Maple, however, keeps better foliage and produces more shade on the south slope of Long Island. We have a number of trees 20 to 25 feet high that have been grown wide apart and will quickly make handsome trees, although they are not at present as broad and solid as Norway Maples.

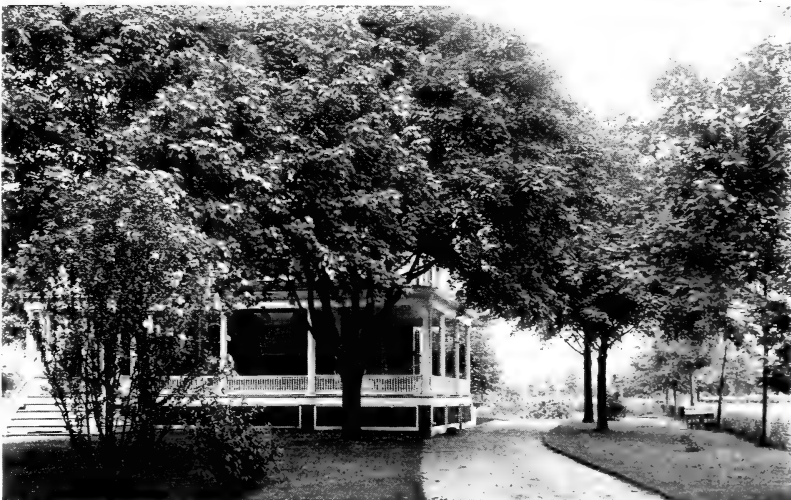
Sycamore. *A. Pseudo-platanus*. The Sycamore Maple resembles in shape the Norway Maple, but the foliage is darker green and the shade more dense. We can show you old specimens in Westbury which are 40 feet broad and in perfect health. It is a favorite tree at Southampton, and other places along the shore, for its thick, leathery leaves resist salt air. There was a fine specimen of it standing alone on Jekyl Island, or Barnum Island, just back of Long Beach, where it had all the unfavorable conditions of salt air.

THE PICTURES ON THE OPPOSITE PAGE

Top.—Residence of Mr. Robert R. Sizer, Plandome, Long Island. On the left, a Norway Maple, and on the right, a Linden, both planted from our nurseries when about six inches in diameter.

Middle.—Norway Maples planted from our nurseries when about five inches in diameter. Drive on the grounds of the late William C. Whitney. These were planted to bring down the foliage, the existing trees being Oak and Chestnut with bare trunks up to fifty feet.

Bottom.—Norway Maples moved by our tree-movers about eight years before the photograph was taken.



INEXPENSIVE RESULTS



LARGE STOCK



TREES FOR LONG ISLAND



DECIDUOUS TREES

MAPLE, continued

Silver. *A. saccharinum*; syn., *A. dasycarpum*. The large Silver Maples are cheaper than the Norway Maples, because they grow more rapidly, and we have an over-stock of them. Our large ones are grown 15 feet apart so they have broad tops and good roots. Some of them have been trimmed repeatedly to broad, symmetrical shapes like a Linden, and others have been allowed to grow up taller, making them more valuable for tall screens.

As to the good and bad qualities of the Silver Maple, we consider it the best quick tree. Some object to the splitting of the trunk. This is because it was formerly customary to cut off the top when setting it out. This formed a crotch low down in the tree, which might split twenty years later. We go over our trees carefully, training the trees to a single leader. In Far Rockaway and Brooklyn the borers are troublesome, weakening the branches so they break off. This is not serious to the eastward. The good qualities of the Silver Maple are numerous. It is the most graceful tree next to the American Elm, and will make a graceful growth where it is too dry for the Elm to do so. It will give shade all summer, while the Carolina Poplar is partially defoliated in August by fungus. These tall trees are particularly economical for shading new residences, forming an avenue, screening objectionable buildings. They are very economical to ship because the long, slender branches tie into small compass. We have shipped several car-loads. If you want shade 30 feet high, plant these Maples. They will cost but a fraction as much as the Norway Maples or

Pin Oaks of the same height. If you want, eventually, other trees, as Lindens, Oaks and Tulip Trees, the Silver Maples may be taken out.

Wier's Weeping Silver. *H. saccharinum*, var. *Wierii*. This is a variety of the last with graceful weeping branches and cut leaves.

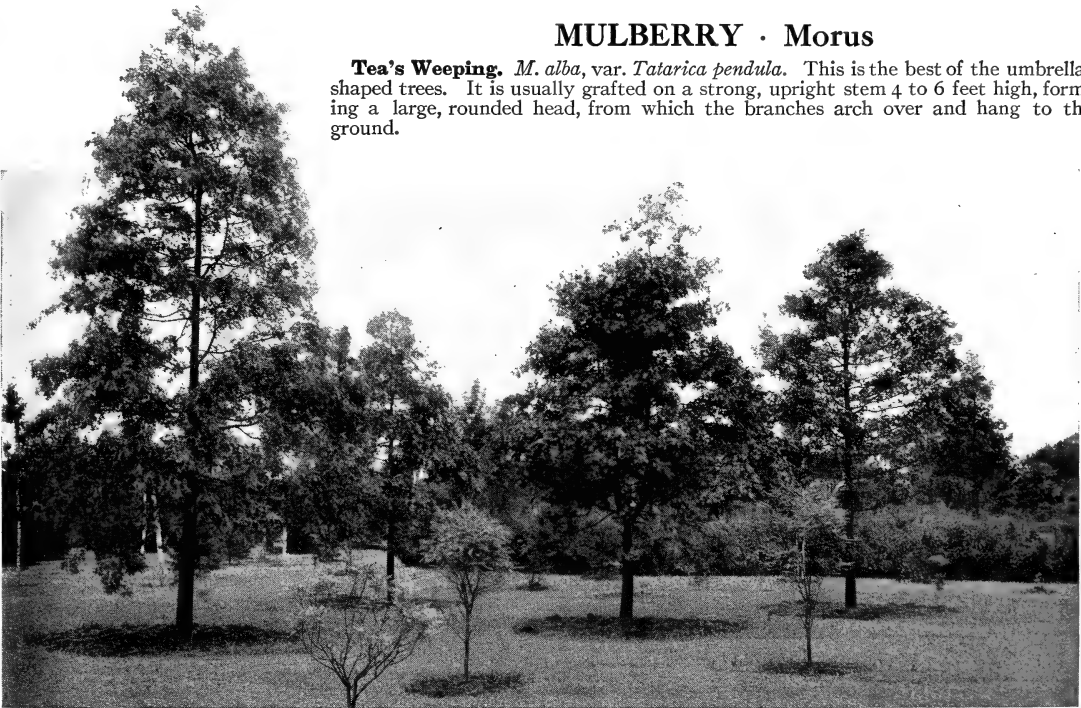
Red, or Scarlet. *A. rubrum*. For big, broad trees at moderate price, we recommend our stock of Scarlet Maples, 20 to 36 feet high, 5 to 10 inches in diameter, 10 to 18 feet spread. These have been in our nursery nine years and are, therefore, cheaper than Norway Maples of the same size which have been nursery-grown for eighteen years. These Red, or Scarlet, Maples were wild trees brought in from the vicinity.

Sugar Maples and Elms were planted by the farmers throughout New England and westward, making some of the best landscape compositions. On Long Island the Red Maple was occasionally planted in this way, and around some of the older villages there are venerable trees, showing a broad, oak-like growth.

The Red Maple will thrive either in damp soil or good soil on the upland. The autumn color depends on the frost. While "Scarlet" is the proper name for them, no one should expect all the trees to turn that color. People frequently return from the northern or mountainous regions in September, and expect to purchase Maples on Long Island that will reproduce the effects they have seen. The Maples will not do it here because the ocean prevents the severe early frosts which the Maples require to produce their most brilliant colors.

MULBERRY · Morus

Tea's Weeping. *M. alba*, var. *Tatarica pendula*. This is the best of the umbrella-shaped trees. It is usually grafted on a strong, upright stem 4 to 6 feet high, forming a large, rounded head, from which the branches arch over and hang to the ground.



Group of Oaks planted on the lawn of Mr. A. W. Connable, Hewlett, Long Island. View the second season after planting. These trees have been properly cut back, mulched and watered. Is not this a better beginning for a residence than the usual planting of little trees?

THE PICTURES ON THE PRECEDING PAGE

Top.—Residence of Mr. William D. Guthrie, Locust Valley, Long Island. This was built in a dense forest, and by planting sixty low-branched, broad-spreading trees, an entirely different landscape was secured. These trees were moved from different parts of the grounds and from neighboring estates on our tree-movers.

Middle.—Norway Maples moved on our tree-movers about fifteen years ago. They have grown even more vigorously than before, because rich ground was prepared two and one-half feet deep.

Bottom.—View on the terrace of Mr. W. P. Thompson, Westbury, L. I. On the left, a large Norway Maple, and the right, a Silver Maple behind the Cedar hedge. This shows accurately the lighter color and more graceful spray of the Silver Maple.



OAK • Quercus

Pin. *Q. palustris*. This species we have available in all sizes up to 45 feet. Our stock presents an unparalleled opportunity to obtain mature landscape results. The Pin Oak is a tree that is worthy of the general admiration it receives, and owners of them usually take great pride in pointing out the rapid growth and handsome appearance of their Pin Oaks. They occasionally grow 3 feet per year where they receive enough food and water. The Pin Oak is one of the easiest Oaks to transplant. That is not saying, however, that it is as easy as a Willow, Poplar or Maple.

All Oaks should be severely cut back when transplanted, especially at the extreme top. If, at this point, three or four vigorous shoots are sufficient, do not cut back and still leave fifty buds to start, but thin out more of the remainder until there are only a few plump buds near the top, and then at intervals of about a foot down

branches, it can be recognized at a distance of half a mile. Trees growing singly along fences, or borders of the woods, are better than trees crowded in the thick woods. The latter, however, can be cut to bare poles 8 inches in diameter, and 24 feet high, or 3 inches in diameter at the top, and make handsome, pyramidal trees 12 feet wide in five years. These can be used for groves and screen-groups or even for avenues. We do not recommend them for the latter purpose because of their unsightly appearance while developing; but we want it to be known that it is practical to develop the highest type of landscape from such unpromising local material.

Red. *Q. rubra*. This is a big, broad tree, having all the qualifications associated with the name Oak, except that of slow growth. It is not particular as to soil. In the autumn the foliage turns a deep red. It has the largest leaves of any of the Oaks. The Oaks are the most important forest trees of Long Island; therefore we are growing them in large quantities, and root-pruning them to keep them in the best condition for transplanting. We make holes 18 inches deep, and plant little Oaks one or two years old. They are in squares so they can be root-pruned in each direction by a root-pruner pulled by a steel cable.

Scarlet. *Q. coccinea*. This species is probably the most common tree on Long Island. The foliage is deep scarlet in the autumn, turning to russet-red and remaining on all winter. Its autumn color is more brilliant than that of the other Oaks. It is native on the driest soils, and makes a large, broad-spreading, dignified tree. This species requires severe cutting back when transplanting. The large sizes are not available in nurseries in quantity, but we have been able to work up a large stock of small plants, there having been a heavy crop of acorns in 1909. We advise that these be extensively planted among other trees and shrubs to give the best permanent landscape. The little trees will grow readily, and you will be surprised to see how they take care of themselves and always look cheerful in a drought,



Red Oak shading a path on the Mineola Fair Grounds. These have grown better than any other trees on the grounds, and are much larger than the trees supposed to be quicker, because they kept right on through drought and neglect.

much more so than do the trees easier to transplant.

Black. *Q. velutina*; syn., *Q. tinctoria*. This grows with the Scarlet Oak, and was formerly considered a variety of it. The leaves are larger and more leathery, and the bark is black. We have a limited number of excellent trees, 8 to 12 feet high, that have been recently root-pruned and transplanted. Those wishing Oaks for dry situations are recommended to try them.

Post. *Q. stellata*; syn., *Q. obtusiloba*. This is one of the slowest-growing Oaks on Long Island. It has great drought-resisting qualities, and it is found on coarse, gravelly soil. Even a small tree has the rough, rugged look of an old Oak.

White. *Q. alba*. The American White Oak comes nearest to the English Oak and therefore to the definition of Oak in literature and art. It is easily distinguished by its rounded lobes about like a finger-tip. The bark is light gray and flaky. It is a sturdy tree, in all stages worthy of respect. You will get more satisfaction from a White Oak tree 10 feet high than from a poplar of 20 feet. Our stock of 2- to 6-foot-high trees has recently been transplanted and should give good results.

Chestnut. *Q. prinus*. The leaves of this tree are like those of the Chestnut. It is a large tree, native of the sandy slopes around the harbors on the north side of Long Island and the gravelly soil of the Rockaway peninsula.

A young Pin Oak can be distinguished from all other Oaks by the long, slender lower branches which have a definite downward angle. Other Oaks have the branches horizontal or ascending. The leaves are small, deeply cut, and resemble those of the Scarlet Oak, except that the base is V-shaped. The foliage is red in autumn. The Scarlet Oak is found on drier ground.

Much of our work is moving large trees from the wild growth. You can find large Pin Oaks in the valleys. We can move them to your lawn. It may be a pleasant recreation to look over your region for a radius of ten miles, and select the best available trees for composing your landscape. The Pin Oak is one of the species to look for. By remembering its ovate outline, and declining lower



TREES FOR LONG ISLAND



DECIDUOUS TREES

OAKS, continued

Swamp White. *Q. bicolor*. This and the Mossy Cup Oak are much alike in appearance and habitat. Both are natives of deep soils and river-bottoms. They are tall trees, with broad, ovate tops, rough bark, sturdy trunks and strong, spreading branches. They show the strength and ruggedness of the Oak even more strongly than the White Oak.

The Swamp White Oak will more quickly give a mature White Oak effect than the White Oak itself. To those wishing to start a plantation or private nursery or forest, having in view the effect of White Oak and wishing to attain it more quickly, we recommend the planting of these small Swamp White Oaks. We have noted that it is a good city tree. In the northeast corner of Union Square, New York City, there is a tree of it, perfect in foliage in late summer, while nearly all the other trees there have their foliage severely injured by insects and city conditions.

Mossy Cup, or Bur. *Q. macrocarpa*. This has twigs ridged with cork, like the Liquidambar, and the acorn cups are shaggy like gray moss.

Laurel-Leaf. *Q. imbricaria*. Those who like specimens of trees that are both rare and beautiful, without being inharmonious, should include this. The general form of the tree is like that of the Pin Oak, but the leaves are without lobes, being about 5 inches long and 1½ inches wide, smooth, glossy and dark green.

Willow. *Q. Phellos*. Like those of the former, the leaves of this have no notches. The leaves are a half-inch wide and 3 inches long like those of a Weeping Willow. It will grow to the same size and shape as the Pin Oak; but, of course, it is much more difficult to look through in winter, because trees with small leaves have numerous slender twigs.

Black Jack. *Q. Marilandica*; syn., *Q. ferruginea*; *Q. nigra*. This is native on the coarsest and driest gravels. It is a low, round-headed tree. The leaves are wedge-shaped, and are more leathery and glossy than any of the others. Some of the small seedlings offered may be planted among shrubs and Pines on the beach and other sterile places. They will make a group that is perfectly at home and always cheerful.

English, or Royal. *Q. pedunculata*. Everyone knows the contribution of this tree to the English landscape. It grows rapidly here, although the equable climate of England suits it much better than ours. We offer a few large trees at low prices.

Pyramidal English. *Q. pedunculata*, var. *fastigiata*. This is broader than the Lombardy Poplar and has a unique appearance.

Scrub. *Q. ilicifolia*. The name Scrub Oak is applied indiscriminately to various Oaks growing up in bush-form after a fire. The species properly called Scrub Oak forms a shrub, 3 to 8 feet high, with many spreading branches. It may be seen as an even-topped growth over a large part of the level, sandy, pine-barren region of Long Island. Repeated forest fires caused its abundance and uniform height. For landscape planting it can be used on the beach and in other sandy situations. The Scrub Oak will present a handsome mass of foliage where most flowering shrubs will look wilted and yellow.

Dwarf Chestnut. *Q. prinoides*. A shrub, 3 to 5 feet high, growing with the Scrub Oaks and Pitch Pines in sandy soil.

PAULOWNIA · Empress Tree

Imperialis. A tree of the Catalpa family, with leaves 1 to 1½ feet wide. Those knowing its perfume sometimes catch a whiff and have to look around and find the tree, because the flowers are so inconspicuous against the sky. They are trumpets, 4 inches long, and match the sky in color. It grows large and thrives well at the seashore.

PEACH · Prunus

Double-flowering. *P. Persica*, var. *camelliflora plena*. A small tree, valuable only for its flowers which closely cover the branches in early spring—large, double, rose-like blossoms in white, pink or crimson.

PEPPERIDGE · Sour Gum

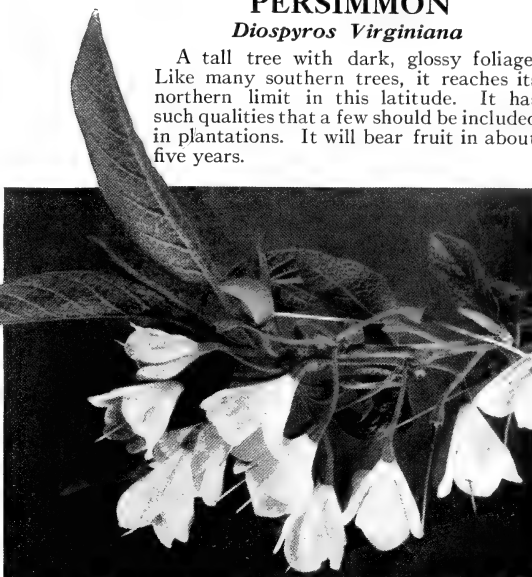
Nyssa sylvatica

For its brilliant color in early autumn, this is greatly admired. It is native around damp ground, and is easily recognized by its shining, elliptical leaves and the level arrangement of the branches. It is a rare tree in nurseries, and we recommend that a few be added to plantations of both trees and shrubs.

PERSIMMON

Diospyros Virginiana

A tall tree with dark, glossy foliage. Like many southern trees, it reaches its northern limit in this latitude. It has such qualities that a few should be included in plantations. It will bear fruit in about five years.



Silver Bell flowers, natural size (see page 20)

PLANE TREE · *Platanus orientalis*

The Oriental Plane is native about the Mediterranean. It is distinguished from the American Plane, or Button-ball, by having irregular patches of yellowish white bark, while the latter is chalk-white. For city planting, the Plane Tree is popular in many regions. In our nurseries, however, the trees are not so successful as on heavier land, and we do not grow a large quantity of them. Like the Poplars, the Oriental Plane makes a more vigorous growth the first two years after planting than most other trees.

POPLAR · Populus

Japanese. *P. suaveolens*. We have been very much pleased with this tree because it entirely resists the fungus causing orange pustules on the leaves of the Carolina Poplar. The foliage is a very interesting feature of this tree, as it is thick and heavy, much like that of the Japanese Rugose Rose. A most valuable feature of the foliage is that it remains in excellent condition to hard frost. It comes out two weeks earlier in the spring than other trees, and is sure to attract favorable attention. It grows rapidly, and we recommend it as the best of a poor family. Like the other Poplars, it suffers from drought, and drops some of its leaves during a dry period in mid-summer. This does not occur every year.



DECIDUOUS TREES

POPLARS, continued

Carolina. *P. deltoides*, var. *Carolinensis*. The Carolina Poplar is the most commonly planted, as it quickly forms a tall tree. However, for most Long Island soil, it is a failure after a few years, and we know of no one who is pleased with it after ten or fifteen years. To do well, it needs rich soil in localities free from drought.

Lombardy. *P. nigra*, var. *Italica*; syn., *P. fastigiata*; *P. dilatata*. The Lombardy Poplar has distinct characteristics, and may be used for landscape effect to vary the sky-line. It is ragged and short-lived on Long Island, and we do not recommend it for screen- or mass-planting, although it is frequently ordered for that purpose because of its rapid, tall growth.

For making a satisfactory screen, we have tall trees of better species, such as the Silver Maple, Norway Maple and Pin Oak, which will keep dense foliage. If these grow too broad, they can be cut back at the sides, as is done in France and Holland.

Balsam. *P. balsamifera*. Similar to the Japanese Poplar. It has large, dark green, leathery leaves and is well adapted for seaside planting. It keeps in better condition than the Carolina Poplar.

PTEROCARYA

Lævigata. In the arboretum of the late Charles A Dana there is an immense tree, spreading 75 feet. The huge branches start out at the ground, giving it the appearance of the Banyan tree. We have a few seedlings from it. The foliage is like the Hickory, to which it is related.



Tulip Tree planted about ten years ago. The large orange-and-green flowers are like the Tulip, and appear in May.



Silver Bell tree at Flushing, Long Island

SILVER BELL · Snowdrop Tree

Halesia Tetraptera

There are a number of flowering trees of medium size that are comparatively little used. This is one of the best. Others are Dogwood, *Styrax*, *Kœlreuteria*, and Hawthorn.

The Silver Bell is densely laden in May with dainty, white, bell-shaped flowers, like the exquisite Snowdrop of early spring. It is very pretty then and has no bad features at any other time of the year. It usually grows up with several stems like a Gray Birch. It will make a tree 25 feet high. We have a number of big plants, 8 to 12 feet high, that will give immediate and mature results.

SOPHORA

Japonica. Imagine a round-headed tree with leaves and flowers shaped like those of the Locust, but with darker and more glossy foliage, and you have a good picture of the Sophora. The flowers are handsome in effect and appear in midsummer when flowers are scarce. They are more showy than those of the Locust, because they are borne in upright panicles outside the foliage, while the Locusts have the flowers hanging down among the leaves. It dislikes dry situations.

THORN · *Cratægus*

Cockspur. *C. Crus-galli*. This is a little tree, or big bush, 10 to 15 feet high, hung with brilliant scarlet fruits in autumn. Our stock is from wild trees on the Hempstead plains. It grows on other exposed places, such as Montauk Point. There are points where something more dignified than the conventional mass of shrubbery is needed, and yet low foliage is required. At such points there can be planted Cockspur Thorn, Beech, Dogwood, Hornbeam, Small-leaved Linden, Liquidambar or Pin Oak. In all of these, we have trees branched at the ground, and they will all maintain their lower branches if given sufficient space. A part of our stock has been trimmed in the form of a hedge.



TULIP TREE · *Liriodendron*

***Liriodendron tulipifera*.** We consider this one of the handsomest native trees on Long Island. It is always straight, clean and symmetrical. The largest tree on our grounds is a Tulip Tree, pulled up in the Harbor Hill woods about seventy years ago. It is now about 83 feet high, 3 feet in diameter, with a 50-foot spread. It occurs on good soil where it makes a trunk as graceful as an Ionic column. As a lawn specimen the tree will quickly make a tall, ovate top.

Pyramidal. *L. tulipifera*, var. *pyramidalis*. This will make a tree 30 feet high and 8 feet wide, similar in outline to the Lombardy Poplar. We are planning to work up a stock of this, as we believe it will be one of the best trees of this form.

YELLOW-WOOD

Cladrastis tinctoria; syn., *Virgilea lutea*

The few people who know this tree admire it exceedingly. It combines the gracefulness of the Elm, the smooth, gray bark of the Beech, and the long flower-racemes of the Wistaria, Laburnum, or Locust. It has very beautiful white flowers in June, and has no objectionable qualities to keep it from any landscape planting.

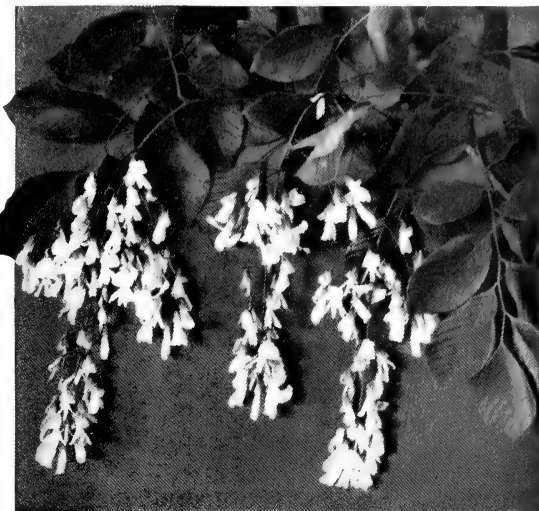
WILLOW · *Salix*

Weeping. *S. Babylonica*. The long streamers of foliage hanging vertically 20 feet or more, to dip in the brook, are characteristic of the Babylonian Willow. It is appropriate or permanently successful only where there is abundant moisture.

Salamon's Weeping. *S. Babylonica*, var. *Salamonii*. This is a variety of the Babylon, growing taller and "weeping" to a less degree. The branches may hang downward only at their tips.

Golden-barked, or White. *S. vitellina aurea pendula*. The new twigs of this species are brilliant yellow, especially in early spring. It forms an upright, wide-branching tree, with a trunk 2 or 3 feet in diameter. It is useful for mass-planting at the seashore or in damp ground.

Laurel-Leaf. *S. pentandra*. "A California Privet grown to a bushy tree with several trunks," is an accurate description of this species. The leaves are larger than those of a California Privet, and are the most brilliant of all foliage, appearing as if freshly varnished. It grows readily in any good soil, and, as it is very rapid in growth, we recommend the use of the smaller sizes for mass-planting at the seashore, holding steep banks, especially near the base where the soil is damper.



The Yellow-Wood has showy, white, pea-shaped flowers. It is a vigorous tree of average size

WALNUT · *Juglans*

Black. *J. nigra*. On the old Long Island farmsteads the Black Walnut tree was as essential for its nuts as the grove of Locusts for its posts and the trunnels used for spiking together the old wooden ships. These veteran Black Walnuts were the largest trees in the vicinity, but many have been recently shipped to Germany for furniture or gun-stocks. As a young tree, Black Walnut does not especially excite admiration; but an old tree, with its far-reaching, massive branches, is always to be venerated and respected. Its successful growth is dependent upon a deep, fertile soil, and when it is given proper conditions, its growth is fairly rapid.

Butternut. *J. cinerea*. On Long Island this does not grow to be such a large, broad tree as the Black Walnut, although native to this section. Toward Canada, where it is more at home, it makes a very large tree. We have a quantity of small trees at low rates, and to those wishing to start a nut-grove we recommend that this size be planted, for all the nut trees transplant most successfully when small-sized trees are used.

Japan. *J. cordiformis*. This resembles the Butternut, but grows more rapidly.



Pin Oaks



Residence of Mr. C. I. Hudson, East Norwich, Long Island. The house was located by a grove of tall Chestnut trees. After these died, White Pines from stock in our nurseries, 20 to 30 feet high, were planted

Evergreens



Booth's Dwarf Arborvitæ 1 ½ feet high, as shipped from the nurseries with ball of earth and burlap.

THE LARGEST DEPARTMENT in our nurseries is devoted to Evergreens—they are our hobby. It used to be a class of trees we avoided because many varieties were apt to die when transplanted, or they were liable to be damaged by the winter. We have overcome these difficulties, and have invented apparatus for transplanting all sizes successfully. We are growing varieties which are hardy and look cheerful all the year. Every species likely to be hardy is being tested at our nurseries. To test more widely, we are giving away collections to be planted on the coast and in the interior, on wind-swept dry hills, and in rich, sheltered valleys. In ten or twenty years there will be material for an accurate report on their hardiness and value for landscape-, shelter- and forest-planting.

This test will probably prove that the best Evergreens for New England, New York, Pennsylvania and New Jersey are those native to this locality and parts of the world having a January average temperature of about thirty-two degrees, with a mean annual variation or difference between the January average and July average of forty to sixty degrees. This includes the Mountains of Japan, Korea, Manchuria, Western China, Siberia, Caucasus Mountains, the Taurus Mountains in Asia Minor, and the Balkan Peninsula; also the southern Appalachian Mountains and the Rocky Mountains.

This classification omits a large number of Evergreens which are common in the trade, and which are native to more equable climates, with a variation between the July average and the January average of from twenty to thirty degrees. These regions are Western Europe, California, Oregon, and the warmer parts of Japan. These more or less tender, short-lived varieties we are growing in comparatively small quantities.

The hardy species we are growing in large quantities from seed, and we believe this is the only ornamental nursery in the East doing this. As a result, we have a very large quantity at low prices. These little Evergreens are the cheapest and, in fact, the only practical way to start a large forest- or landscape-planting. If you have a hill on which to plant ten acres of Pines, it makes no difference in the result whether you plant two-year-old seedlings 4 inches high, or trees 2 feet high. At the end of four years the field will look the same.

If you wish to form a background to your residence, or landscape-planting, or make a screen, we have hundreds of Pines, Cedars, Spruces and Firs 20 to 30 feet high, and fifteen to forty years old, suitable for delivery at any time of the year. Of medium-sized Evergreens 2 to 5 feet high, the size usually sold by nurserymen, we have a large and very superior stock. They are grown wide apart, the tops have been pinched back to make them dense and symmetrical, they are root-pruned or transplanted to make an abundance of fibrous roots, and when delivered to you, these roots are preserved in a big ball of earth, bigger than usual.



TREES FOR LONG ISLAND



EVERGREENS

The grouping of Evergreens is an easy matter. When they arrive, set them on the ground, move them about, like chessmen, until the grouping is satisfactory. The time of the year for planting Evergreens is of minor importance. The important thing is that they have sufficient roots.

The spring-planting season commences from March 1 to 15, as soon as the frost is out of the ground, and continues until the middle of May. In fact, there is no definite end to the season because, with a ball of earth of good size, trees can be moved while the young growth is starting. This young growth is not liable to wilt on *Arborvitæ*, *Retinosporas* and Red Cedar, and they can be moved right on through June and July. With Pines, Spruces and Firs, the young growth is liable to wilt down and, while not killing the tree, may cause it to retain its curved position, and we do not move many of them until the August-September season, when the new growth has ripened up.

The August-September season for transplanting Evergreens is just as successful as any other. The season's growth is completed for the tops, but the roots continue growing until the ground freezes. In fact, the roots grow more than in March because the ground is warmer. Send for our book, "Hicks' Evergreens for August and September planting," showing how all sizes and kinds of Evergreens are successfully transplanted in a season when there is no other garden work to interfere, relieving the congestion of the spring season and permitting the planting to be done when you are on the place to superintend it.

Winter transplanting of Evergreens of from 6 to 40 feet high is entirely practical. On Long Island, the ground does not freeze deeply enough to interfere with digging until after midwinter, and not often then. Foresight in mulching will permit work to be done all winter with no interference from frost. Send for "Planting Large Evergreens in Winter," a book of sixteen pages, describing how we can economically move Evergreens to your grounds all winter. We can thin out Evergreens on your place or move in Evergreens from the vicinity, from the wild growth or from a neighboring estate, by coöperating with your men and teams, we supplying the apparatus and a few expert men. One important feature of transplanting Evergreens in winter is that more time and care can naturally be devoted to the work than is possible during the rush of spring planting, when there is always more to do than can be crowded into the few short weeks of good spring weather.



Abies homolepis; syn., *brachyphylla*, one of the valuable species of Asia. View in the Arnold Arboretum, Jamaica Plains, Mass. This institution is introducing a large number of very valuable ornamental trees from Asia.



On page 11 there is a group of large trees, which is continued by this group of Cedars, Pines and *Arborvitæ*. The object was to build up on the hill behind the house an evergreen background and give a hospitable appearance. Incidentally, the evergreens screen the water-tank. The trees were growing along the hedgerows where they were a distinct detriment to the landscape, cutting up the broad expanse of meadow.

A large part of our work, both in August, September and in winter, is making large evergreen groups like this.



EVERGREENS

ARBORVITÆ

American. *Thuja occidentalis*. Before the advent of the California Privet, this was extensively used for hedges. Compared with most other evergreens, it is easier to transplant and easier for the nurserymen to get up a stock from collected plants. In cultivation it grows 20 to 30 feet high, and about half as wide, with fairly dense foliage, bright green in summer, and brownish green in winter. This winter color is the principal objection to its use. It is not a dignified or impressive tree, and the demand for it seems to be limited to planting young hedges or filling gaps in old hedges.

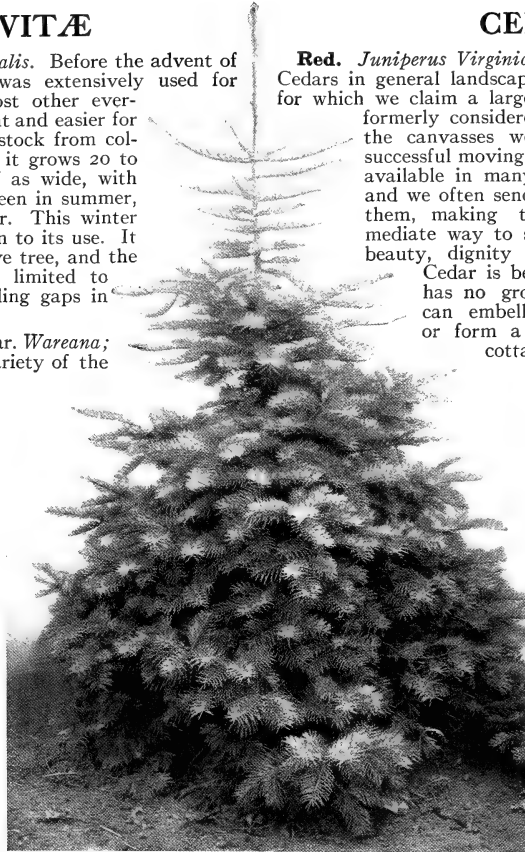
Siberian. *T. occidentalis*, var. *Wareana*; syn., *T. Sibirica*. This is a variety of the American, of denser growth and brighter green color. It forms a broad pyramid, 10 feet high and 6 feet broad. It keeps such a symmetrical shape that it is suited for formal planting.

Pyramidal. *T. occidentalis*, var. *pyramidalis*. This grows in the shape of the Red Cedar, forming a cylinder, 2 feet in diameter and 10 feet high. Like the Siberian, it is darker green and more dense than the American.

Booth's Dwarf. *T. occidentalis*, var. *Boothii*. In evergreen bedding, this is very useful. It will make a little dome, 2 feet in diameter, dense and compact. Oftentimes at the foundation of a house, or in the formal garden, no other evergreen will give such mature results so quickly and cheaply. We have other similar dwarf Arborvitæ, as *Globosa* and *Compacta*.

Golden, or George Peabody. *T. occidentalis*, var. *lutea*. This and the *Retinispora plumosa aurea* are the two best golden evergreens. The foliage is clear yellow all the year and forms a decided contrast when planted in a group with the green varieties.

Standish Japanese. *T. Japonica*; syn., *Thuyopsis Standishii*. This resembles the American so closely that it can be substituted for it, and in many ways is just as good. We have fine, large plants, worth considering where a big, cheap evergreen is wanted.



White or Concolor Fir in our nurseries. We have a few excellent specimens which are kept carefully root-pruned, as it is a species difficult to transplant.

CEDAR

Red. *Juniperus Virginiana*. The introduction of Red Cedars in general landscape planting is an achievement for which we claim a large share of credit. They were formerly considered difficult to transplant, but the canvasses we have invented insure the successful moving of the larger sizes. Cedars are available in many parts of the eastern states, and we often send men and apparatus to move them, making the cheapest and most immediate way to secure large evergreens. The beauty, dignity and appropriateness of the Cedar is beginning to be recognized. It has no grounds for just criticism, and can embellish the most stately garden or form a windbreak to the humblest cottage. Cedars thrive in any

soil, but they do not endure shade; therefore, do not plan to make a screen of them under old Maples.

We have made a large investment in old Cedars, and have brought in many thousands of them, grown them a few years, and shipped them out again, sending car-loads to Ohio, Pennsylvania, Massachusetts, Rhode Island and other points. They are a comparatively easy tree to pack, because of their slender growth.

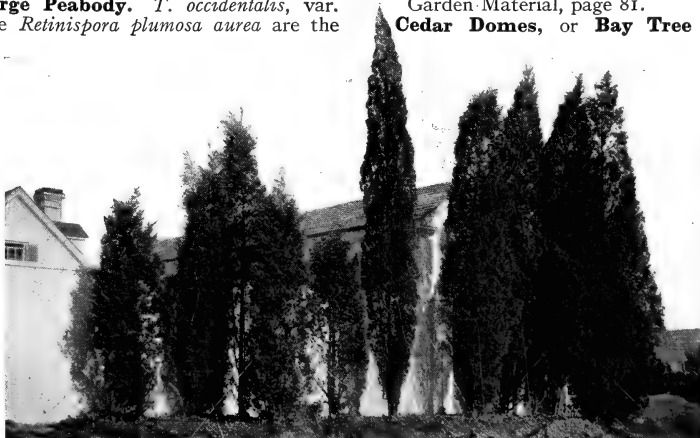
Blue. *J. Virginiana*, var. *glauca*. These are almost as blue as the Koster's Colorado Blue Spruce. They should be used to brighten up groups of other evergreens. Occasionally a wild Cedar is seen with blue foliage and bright blue berries. This stock is propagated from one of the best of these.

Cedar Arches. See Formal Garden Material, page 81.

Cedar Standards, or Bay Tree Form. See Formal Garden Material, page 81.

Cedar Domes, or Bay Tree Form. See Formal Garden Material, page 81.

Mt. Atlas. *Cedrus Atlantica*. The Mt. Atlas Cedar, Cedar of Lebanon, and Deodar Cedar are the true Cedars, the Red Cedar being, correctly speaking, a Juniper. The Cedar of Lebanon and Mt. Atlas Cedar grow together in Palestine. They are almost identical. The crusaders brought back the Cedar of Lebanon, and gave it the most honored position near the castles of England.



Part of plantation of 100 Cedars moved by our men and apparatus, with the co-operation of the local men and teams on the place. These trees were growing on the place and were used according to the plans of Mr. C. C. Colburn, landscape architect, for screening the service end of the residence of Mr. Tracy Dows, Rhinebeck, N. Y.



EVERGREENS

FIR continued

Cephalonian. *A. Cephalonica*. This closely resembles the Nordmann's Fir, but has more sharply pointed needles.

Fraser's Balsam. *A. Fraseri*. This is a form of the Balsam Fir native to the southern Appalachian Mountains. It has exactly the same appearance as the Balsam Fir native in the northeastern states.

White, or Concolor. *A. concolor*. This is native in Colorado and, like the Colorado Blue Spruce, has a decidedly white or bluish bloom to the foliage. We consider it the handsomer tree, not so violent in its contrast and superior in dignity. Its rate of growth is moderate, but it attracts attention even when small.

Veitch's. *A. Veitchii*. This is a narrower tree than the Nordmann's Fir, more open and graceful, and the under side of the foliage is more distinctly blue.

Abies homolepis. We are testing this, and hope to prove that it is the best dark green evergreen. It appears to be free from the one defect of the Nordmann's Fir—the occasional winter-killing of buds.

Abies subalpina. This closely resembles the Concolor, and grows in the same region.



Common Juniper feathering a group of evergreens on a steep bank

CEDAR, continued

In the Charles A. Dana Arboretum, Glen Cove, there is a Mt. Atlas Cedar, 40 feet high. From it we have grown a thousand little trees which should be widely tested. They will do best in groves of Pine and Spruce, which they will brighten up by their cheerful blue color and add a dignified variation with their wide-spreading, horizontal branches.

Blue Mt. Atlas. *C. Atlantica*, var. *glauca*. This is a brilliant blue variety of the above, propagated by grafting, and is valuable for creating contrast of colors in the evergreen planting.

CEPHALOTAXUS

Fortunei. A round bush with deep green, glossy foliage, resembling that of the Yew, but even richer in appearance. It is not hardy in the open, but in a damp, shady place, or massed in with other evergreens, it will thrive.

CRYPTOMERIA

Japonica. This Japanese tree has the appearance of the "California Big Tree." There are several old trees on Long Island, over 30 feet high, but they get ragged unless they are sheltered by other trees.

FIR · Abies

Nordmann's. *A. Nordmanniana*. We offer exceptional value in these rich, dark, glossy evergreens. They have long been a favorite at these nurseries, and we have many plants fifteen and twenty years old. They have been repeatedly root-pruned and moved apart to keep them in the best condition for transplanting. On many lawns, evergreens are used as individual specimens. The Nordmann's Fir may well be the chief. The Oriental Spruce is a good companion. In contrast to their dark shades, lighter Firs and Spruces such as Engelmann's Spruce, Colorado Blue Spruce, White Spruce, Concolor Fir, or Veitch's Fir may be used.



Nordmann's Firs, twenty-five years old, transplanted from our nurseries to the grounds of Mr. Middleton S. Burrill, Jericho, Long Island



JUNIPER • Juniperus

Irish. *J. communis*, var. *Hibernica*. This will make a narrow spire, 5 feet high and 10 inches in diameter, of bluish green foliage. It does not thrive well with us. We are training small Red Cedars for the same purpose.

Swedish. *J. communis*, var. *Suecica*. It is just the same as the Irish Juniper, except that it is slightly wider and hardier. For formal planting, it is most appropriate.

Common. *J. communis*, var. *Canadensis*. There is a wide demand for a low evergreen that will stay low and remain in good condition. This is native on Long Island and northward, and fills the requirements exactly. We have worked up a large stock and it is in the best possible condition for successful planting. The trees will grow about 1 to 3 feet high, and 3 to 8 or more feet in width. They delight in dry, sandy soil, sunshine, and severe winds.

Entrance planting has heretofore consisted of tall shrubs or evergreens, which obstruct the view and make a point liable to automobile accidents. Such plantings should be removed and grass or low plantings substituted. There are but few plants which will stay low. This is one of them. Others are Thunberg's Barberry, Mugho Pine, *Spiraea callosa alba*, Boxwood, *Rhus aromatica*, Indian Currant, *Deutzia gracilis*, Spreading Yew, Canadian Yew, Dwarf Japanese Yew, Dwarf Norway Spruce and *Retinispora obtusa nana*.

Juniperus Sabina prostrata. This grows along the coast of Maine, creeping along the rocks just above the surf. In cultivation it will make a bright green mat of foliage 6 inches high and 5 feet across, turning bluish purple in winter.

Juniperus Chinensis. A compact, blue-green tree, resembling the Red Cedar.

Juniperus Chinensis procumbens. This makes a cushion of bright green foliage about 8 inches high. In Japan it is used for holding sand-dunes.

Juniperus stricta. A compact, little, blue-green plant, about 2 feet high and 1½ feet broad, making a dense, sharp cone. It is useful in a formal planting of evergreens.



Trimming large Cedars in our nurseries, where they have been growing seven years

HEMLOCK HEDGE

We have two old hedges that can be used instead of a stone wall around a formal garden. They will cost no more, and will increase in size and dignity. These hedges have been carefully pruned for thirty or forty years. Both were started by nurserymen who appreciated the superior beauty of the Hemlock, and made hedges on their home grounds. We moved them to our nursery to have them available for immediate planting. They can be readily shipped by rail.



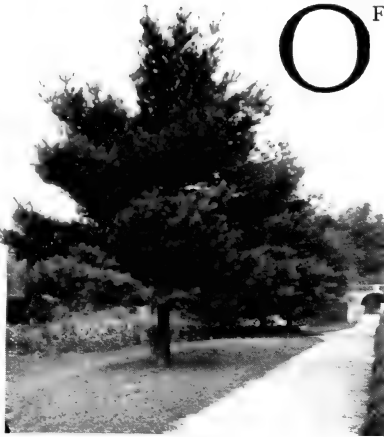
Hemlock hedge No. 2 in our nurseries. This is about forty years old



Hedge twenty-five years old, moved from our nurseries, to separate the flower-garden from the laundry-yard. Residence of Mr. W. G. Oakman, Roslyn, Long Island.



EVERGREENS

WHITE PINE • *Pinus Strobus*

Large White Pine moved by our tree-moving apparatus about three years before it was photographed.

OF ALL trees in the northeastern states, this has taken the lead as a timber tree since the country was first settled. In the landscape, it is king of the evergreens. Fashions in all else may change, but they cannot change to set aside the White Pine. It lends itself to nearly every situation, except that it does not endure salt spray directly from the ocean so well as some other Pines. With a few feet of either deciduous or other evergreen trees to sift out the salt, it thrives. For forest-planting, it is being used in lots of 10,000,000 annually. In thirty to sixty years the crop will be ready to harvest.

For extensive landscape planting, it is used in lots of 10,000 or more. For instance, at Wheatlands, the estate of Mr. E. D. Morgan, Wheatley Hills, Long Island, the landscape consists of two hills, clothed with Pines, with the residence and several hundred acres of meadow between. Few have the imagination and foresight to obtain such hospitable and dignified effects by the simplest, most direct and economical means. The planting cost about \$30 per acre and maintained itself. Two- or three-year-old Pines were placed at intervals of 10 feet among the Bayberries, Blackberries, White Birches and Cedars of the abandoned sandy hills.

For evergreen windbreaks, White Pine is the best because it is so broad and presents so many little needles to stop the wind. Three rows of trees are better than a single line, because there are six layers of foliage that the wind must force through. It is far better than a wall, because the wind hits a wall and bounces over.

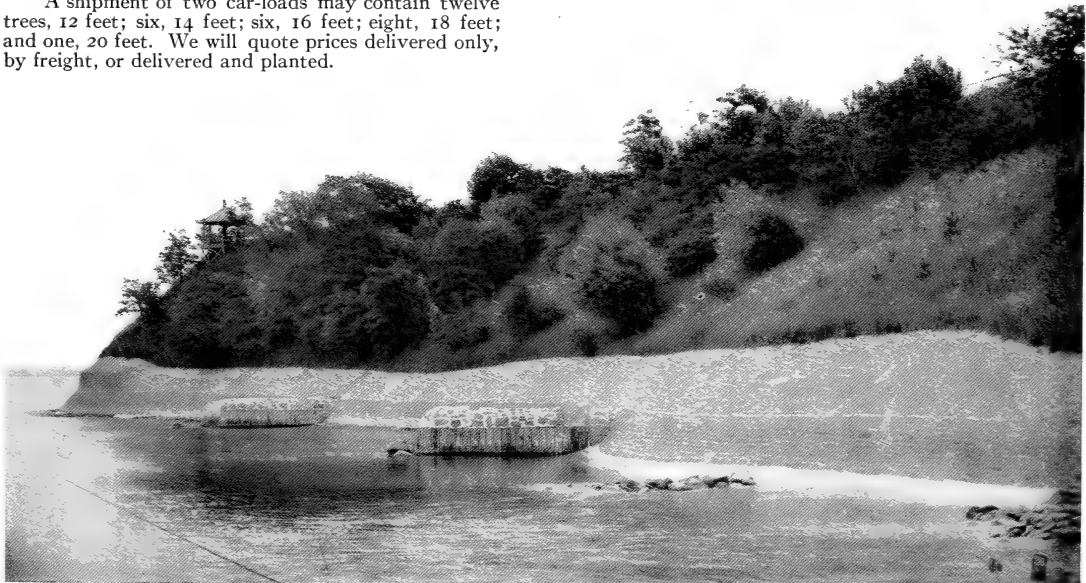
White Pine is the quickest-growing evergreen in the long run. It will gain from 2 to 3 feet per year.

The beauty of the White Pine is but little understood, because many people have not had the opportunity to see it at its best, where it has had ample room to develop its broad spread, and exhibit its horizontal lights and shadows. It will equal the Cedars of Lebanon, which have been growing for centuries about old English Castles. Some may object to White Pine on small lawns, but it can be easily kept in bounds by pinching back the ends of the longest growths in May or June.

We offer the largest and probably the only stock of big Pines in the country. We bring in trees from 10 to 30 feet high, and grow them several years so that they are in the best possible condition for transplanting. Trees up to 30 feet high can be shipped by rail and larger ones by barge. White Pines of large size have been extremely successful when moved. They soon recover their normal density and rate of growth.

The most economical way is to have us ship two car-loads of trees, 10 to 25 feet high, from the wild groves where we have root-pruned them. They can be shipped in August and September, or during the winter and spring. They are economical, because they have grown as weeds in the pastures and there is no expense for the ten or twenty years they have been growing. You pay only for the transplanting. We send a crew of experienced men and apparatus for quickly handling large balls of earth. Local men and teams are also employed.

A shipment of two car-loads may contain twelve trees, 12 feet; six, 14 feet; six, 16 feet; eight, 18 feet; and one, 20 feet. We will quote prices delivered only, by freight, or delivered and planted.



Planting above sea-wall on the grounds of Mr. August Heckscher, Huntington, Long Island. The shrubs are Bush Honeysuckle and Wild Cherry, and between them are scattered little Pitch Pines, Scotch Pines, and White Spruces so that eventually part of the bank will be covered with evergreen foliage protecting it all the year.

The wall and jetties have been very successful because both the sea-wall and the pavement of the beach conform to the natural slopes, whereas many vertical sea-walls are washed out by water dropping back from the vertical face of the wall.

If the bottom of the bank is held, we can plant the slope, as we have large quantities of native material at very low prices suitable for planting large areas at low cost.



EVERGREENS



Part of two car-loads of White Pine, 12 to 16 feet high, the first year after planting. These were trees which we root-pruned where they were growing wild. They are broad, full specimens. We have shipped many car-loads, and they have been very successful.

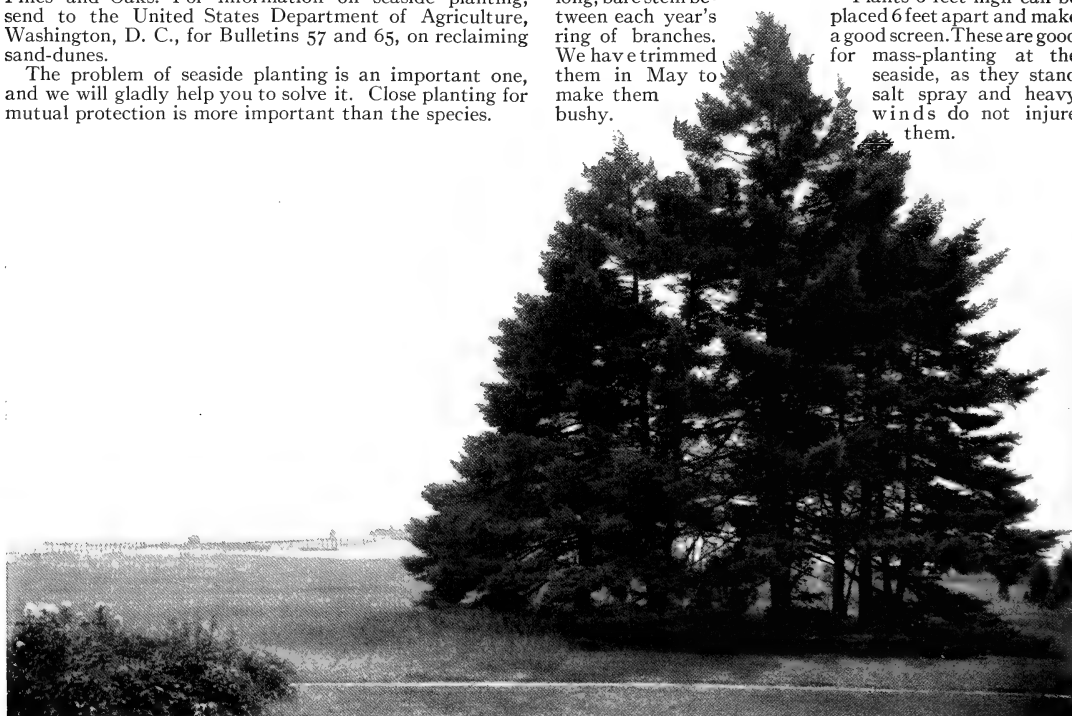
PINE, continued

Pitch. *P. rigida*. This is an excellent tree for seaside planting. It has been largely used at Cape Cod and elsewhere to hold drifting sand. Our little trees are the most economical for this purpose. It is best to transplant the beach grass and place the Pines between the clumps of grass. The Pitch Pine is equally good on sandy soil, and it will take care of itself and thrive where the conditions are too severe for many other species. The best landscape material for a large part of Long Island is the native Pines and Oaks. For information on seaside planting, send to the United States Department of Agriculture, Washington, D. C., for Bulletins 57 and 65, on reclaiming sand-dunes.

The problem of seaside planting is an important one, and we will gladly help you to solve it. Close planting for mutual protection is more important than the species.

Scotch. *P. sylvestris*. This is a big, round, blue-green Pine, which will remain in good condition until it is twenty or more years old. It grows rapidly while young. It can be used for quick effects, planting more permanent trees, as the White Pine, between. We have a number of plants 5 to 8 feet high, which give a large mass of foliage for a small expense. In fact, they are the cheapest evergreen of that size that we offer. They are not broad, full specimens, because they grow so rapidly that there is a long, bare stem between each year's ring of branches. We have trimmed them in May to make them bushy.

Plants 6 feet high can be placed 6 feet apart and make a good screen. These are good for mass-planting at the seaside, as they stand salt spray and heavy winds do not injure them.



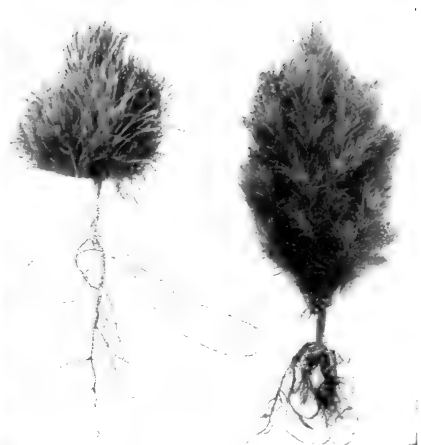
White Spruce close to the surf at Far Rockaway. These have been growing for thirty years, and are most thick and solid where exposed to the salt spray. A view on the lawn of Mrs. John H. Cheever, Far Rockaway, Long Island



Cones of White Pine should be picked in early September



Sow seeds early in spring and shade them. Broadcast is better than in drills



Two-year Austrian Pine. Root-pruning makes better roots

White Pine four years old ; 1 ft. high



Placing seedlings on the Yale Transplanting Board. Board is 6 feet long and plants forty-seven trees at one operation



We have 3,000 trees of this size. They are planted in squares so they can be root-pruned on all sides by a steel blade drawn by wire cable and tackle, putting them in splendid condition for transplanting.



Loads of White Pines 12 feet high. We have 100 of these in our Nurseries and hundreds more up to 30 feet high growing wild in the collecting fields. They have been root-pruned. We will send a crew of men for them on orders for two car-loads of about sixty trees.

LIFE-HISTORY OF THE PINE



EVERGREENS



Douglas Spruce, 8 to 10 feet high. These trees are transplanted wide apart so that they can grow up to 12 feet high. Then they will be thinned out and root-pruned. By this method you can procure old specimens in the best possible condition

PINE, continued

Austrian. *P. Laricio*, var. *Austriaca*. This is one of the sturdiest of the evergreen family, because the needles are so long and stiff. The outline is very regular, the tree making an ovate dome about 20 feet high and 15 feet broad. Soon after it gets to that size, it may commence to lose some of its lower branches, for none of the European Pines remain in good health in this climate to a mature old age. In the vigor of their youth, however, they are excellent trees.

Japanese Red. *P. densiflora*. This, in appearance, is intermediate between the Scotch Pine and Pitch Pine. For extensive forest or seashore planting at a low cost, we offer small plants at low rates. This species grows as rapidly as any Pine and, perhaps, gains more rapidly than others in width.

Korean. *P. Koraiensis*. Promises to be very valuable. It comes from a climate similar to ours. It never is winter-killed and, so far as tested, has shown no sign of failing. It has five needles, like the White Pine, but they are long and stiff like the Austrian Pine, and the tree makes a dense, compact dome like that species. It bears edible nuts.



Mugho Pine. At this point it was desirable to have a view open to the distance, shut off the bare road and give a sense of enclosure to the lawn. Mugho Pine is one of the few evergreens that will successfully accomplish this result. View of the residence of Mr. William M. Baldwin, Garden City, Long Island. South of the residence are three large Lindens moved by our tree-movers several years ago.

Red, or Norway. *P. resinosa*. This is native on dry, gravelly soil and rocky ridges from Connecticut to Minnesota. It closely resembles the Austrian Pine. The foliage is darker green and not quite so stiff. The bark has a reddish tinge. We regard it very highly, and would recommend planting it, even if it is necessary to take small plants. As it is a native tree, it should be long-lived here. It grows on poorer soil and more rapidly than the White Pine, but does not make so broad a tree. The timber resembles the Yellow Pine, and has been extensively used for masts and spars. The name Norway



TREES FOR LONG ISLAND



EVERGREENS

PINE, continued

comes from the town of Norway, Maine. We have several car-loads of trees 10 to 25 feet high, which have been root-pruned where they have been growing wild in the pastures. These can be shipped out in August and September, or in winter.

Swiss Stone. *P. Cembra*. This is a compact, slow-growing Pine, with blue-green foliage, suitable for places where a tree about 15 feet high and 8 feet wide is wanted. It is so slow in reaching this size, however, that it can be used for planting in formal gardens or evergreen planting where 4 to 6 feet is the size wanted.

Limber. *P. flexilis*. A promising Pine in the Rocky Mountain region, with blue-green foliage and long slender branches.

Bhotan. *P. excelsa*. This is a close relative of the White Pine, from the Himalayas. It has needles about twice as long, which are bent and hang straight down. It winter-kills under the same conditions that kill the California Privet—a temperature of zero for several days in early winter, after an autumn which has favored late growth.

Jack, or Gray. *P. divaricata*; syn., *P. Banksiana*. This grows in the same region as the Red Pine and on still drier ground. It has dense, dark green foliage and wide-spreading, picturesque branches.

Jersey. *P. Virginiana*; syn., *P. inops*. Similar to the Jack Pine, with the same dense, dark foliage and picturesque, wide-spreading branches.

Pinus parviflora. var. *glauca elegans*. A beautiful little Pine from Eastern Asia. It spreads more broadly than the Swiss Stone Pine. We recommend its use on small places where there is only room for a few choice specimens, and at the edges of groves of White Pine. It is a good companion to the Korean Pine.

Bull, or Western Yellow. *P. ponderosa*, var. *Jeffreyi*. This grows from Colorado westward, and has longer needles than the Austrian Pine, which are of a light sage-green.

Pinus Massoniana. Native to Japan, this resembles the Red and Austrian Pines. It is a sturdy, rugged tree, with large, stiff needles fitting it for the most exposed situations on the seashore and hill-top. We recommend the use of some of our small plants in shelter-belt and forest plantations. They grow rapidly and take care of themselves.

Table Mountain. *P. pungens*. Sturdy tree, native to dry mountain-slopes in Pennsylvania and southward. It resembles the Pitch Pine.

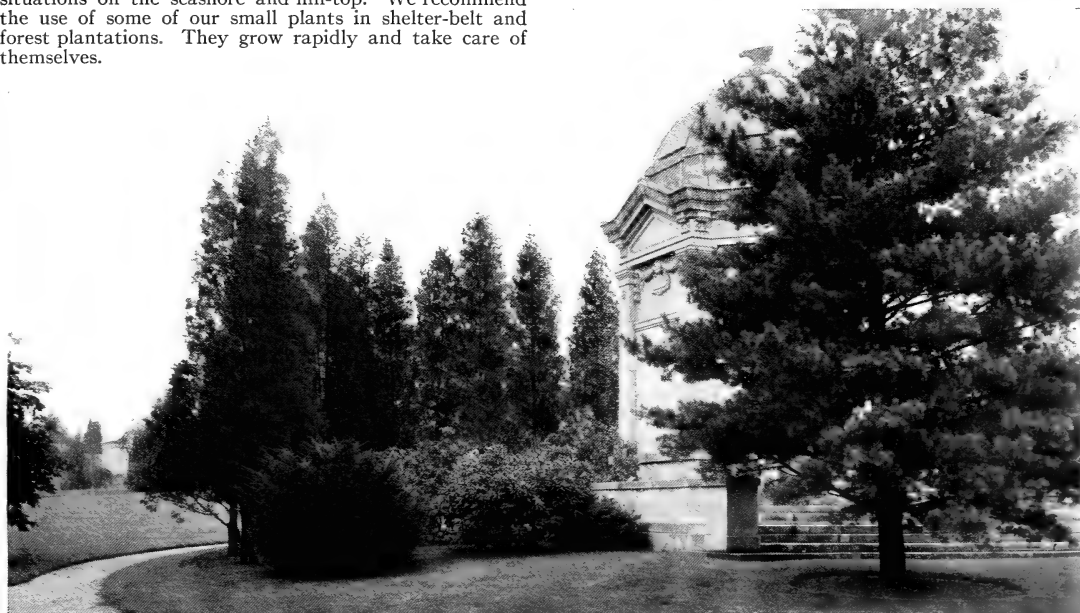
Mugho, or Mountain. *P. montana*, var. *Mughus*. This differs from all other Pines in having no leader. It forms a big, hemispherical bush, varying in height from 2 to 10 feet, and usually twice as broad as high. It is perfectly hardy, and can be used for a great variety of situations. On steep banks, it will make a solid carpet of green. In beds of evergreens, along roads where it is desirable to have a view over the tops, this could be planted. For basal planting at the foundation of a house, the Mugho Pine makes one of the most economical of evergreens, because it will cover a larger area at less expense than Boxwood, Retinospora, or Yew. To prevent its getting too large, nip back in May and early June. A greater number of buds for the next year's growth will then be formed. Mugho Pine may, of course, get too large for the situation in ten or fifteen years. It may then be taken out and replaced by smaller plants.

We have a large stock of Mugho Pine which we root-pruned last year.

JAPANESE UMBRELLA PINE

Sciadopitys verticillata

This is as different from the true Pine as any evergreen can be. Botanically, it is a puzzle, but it appears to belong to the Coniferae, or cone-bearing family. For formal garden planting, or a specimen in a bed of evergreens, or as a rare evergreen in a collection, this will always attract attention and appear in harmony. It makes a narrow pyramid 10 feet high and 4 feet broad not unlike the Pyramidal Boxwood in color and texture. The foliage is arranged in whorls like ribs of an umbrella. Each leaf is $\frac{1}{4}$ inch wide and 4 inches long, of the dark green characteristic of the Boxwood, Yew and Palm. It appears to be free from winter-killing, but it looks like a plant that repays having plenty of food and water; probably the conditions that suit Boxwood and Rhododendrons rather than the conditions for Pitch Pine.



An important problem in American cemeteries is the separation of various monuments and mausoleums. These Pines and Cedars were taken from the wild growth on Long Island and moved on a barge across Long Island Sound and planted in Woodlawn Cemetery.



A basal planting of *Retinisporas* (the larger domes at the right and left of the entrance), and of other dwarf evergreens. Such a planting may be made of *Rhododendrons*, *Boxwood*, *Pachysandra*, *Holly*, *Yew*, *Dwarf Arborvitæ*, *Juniper*, *Mugho Pine*, *Dwarf Spruce*, *Japanese Barberry*, *Deutzia gracilis*. One good way is to come to the nurseries, with a plan, or photograph of your house, to select the plants and fit them in.

RETINISPIORA • Japanese Cypress

Plumosa; syn., *Chamæcypris pisifera*, var *plumosa*. This *Retinispora* is largely used in evergreen beds. The foliage is of fine texture, fern-like in form, and the trees make graceful little domes from 2 to 8 feet high. It is best to keep them clipped annually, as it makes them dense and compact. Without clipping, they are apt to grow too large for the situation, and to become open by the weight of the snow. For planting along the south side of a house, against the foundation, they are excellent. With them may be grouped *Boxwood*, *Yew*, *Berberis Thunbergi*, and other low plants.

Golden. *R. plumosa aurea*. This has been very popular on account of its bright yellow color. It needs the same cultural conditions mentioned for the former.

Blue. *R. squarrosa*. We consider this the prettiest blue evergreen for the summer when it is as blue as Koster's Blue Spruce. It is as graceful as the maidenhair fern. In evergreen beds it is particularly successful, especially if clipped annually. It makes a dense, broad dome 3 to 6 feet high. It will look best when kept to a small size, although it will grow, like the other *Retinisporas*, to be a tree.

Thread-branched. *R. filifera*. This has long, slender, thread-like branches hanging downward from 6 to 12 inches. We have a few tall plants suitable for the back of beds.

Obtuse-leaved. *R. obtusa*. All of the above *Retinisporas* belong to the species *Pisifera* which is very distinct from the *Obtusa* species. The *Obtusa* has a dark green color like the Nordmann's Fir, or *Boxwood*, and there is a special demand for this quality. There is a shell-like arrangement of the fronds of foliage that gives it a distinguished air. It is this species which the Japanese grow as dwarfs, keeping them as heirlooms for a century or more. Like other *Retinisporas*, it prefers rich, moist soil.

Dwarf Obtuse-leaved. *R. obtusa nana*. There are several varieties of the *Obtusa* of compact, dense, dark green growth used in evergreen bedding. The shell-shaped fronds of foliage give them a venerable and most interesting appearance.



Sample of old Golden English Yews in our nurseries, described on page 36. They are four to five feet broad, having grown on Long Island over sixteen years. Their rich, dark green appearance in winter, and their broad, rounded outlines will give a touch of Old England to a home landscape.



SPRUCE

White. *Picea alba*. We recommend this as the best Spruce for general culture in this region and northward. It is native from Maine to Alaska. White Spruce has been tested on Long Island for the past sixty years. It keeps in good condition, while the Norway Spruce gets open, ragged and brownish green. White Spruce keeps a cheerful, blue-green color through the severest winters. The reason is, that the White Spruce is accustomed to a changeable climate, and the Norway Spruce is accustomed to one more equable.

We have a stock of 40,000 trees. They are especially adapted for hedge-planting. They will make a tighter hedge than any other evergreen tree. For extensive planting on windy hill-tops they are excellent. A grove of them will make a windbreak of exceptional density and beauty. On Dosoris Island, the arboretum of the late Charles A. Dana was sheltered on the northeast side by a belt of White Spruce. The trees are now 25 feet high, and excelled in condition and beauty by no other species in this extensive collection. There are also plants in the same group 60 feet high, which stand against the severe winds of Long Island Sound. Both at Dosoris and at Rockaway, the White Spruce is full and dense after thirty years, while the Austrian Pine has died or lost its lower branches, making it valueless as a windbreak.

For planting at Southampton and similarly exposed situations, we know of no evergreen to be more highly recommended, for it has the ability to stand the salt spray. At Bar Harbor, where it is native, it grows just above the rocks next the surf. It seems to like the conditions near the sea better than inland. For planting on a steep bluff next the salt water, these little trees are excellent, because their dense foliage will prevent the freezing and thawing, with the wind and rain, from eroding the bank.

As lawn specimens, the White Spruce compares favorably with the Engelmann's Spruce, Colorado Blue Spruce, Concolor Fir and Nordmann's Fir. In fact, it can be used to form the bulk of groups of pointed-top evergreens and rarer evergreens used for borders.

In Maine we have 25 car-loads of White Spruce from 8 to 30 feet high, which we have root-pruned. We can ship these out on orders of two or more car-loads. We believe

our offering of White Spruce has never been equaled for cheapness, quality or quantity. We advise those wishing a large quantity of small evergreens to consider these plants of 1 and 1½ feet high, because there probably will not be an opportunity later to get plants of these sizes so cheaply. If you are contemplating the planting of a windbreak, shelter-belt or evergreen hedge, these are the trees admirably suited to your purpose. They are vigorous plants, sure to take hold and grow vigorously. You will be proud of them.



Douglas Spruce tree with no ball of earth and roots cut too short, showing lack of previous root-pruning. The value of trees depends upon the parts which you do not see. We root-prune and transplant our evergreens frequently. This adds to the cost, but adds more to their value to the purchaser.



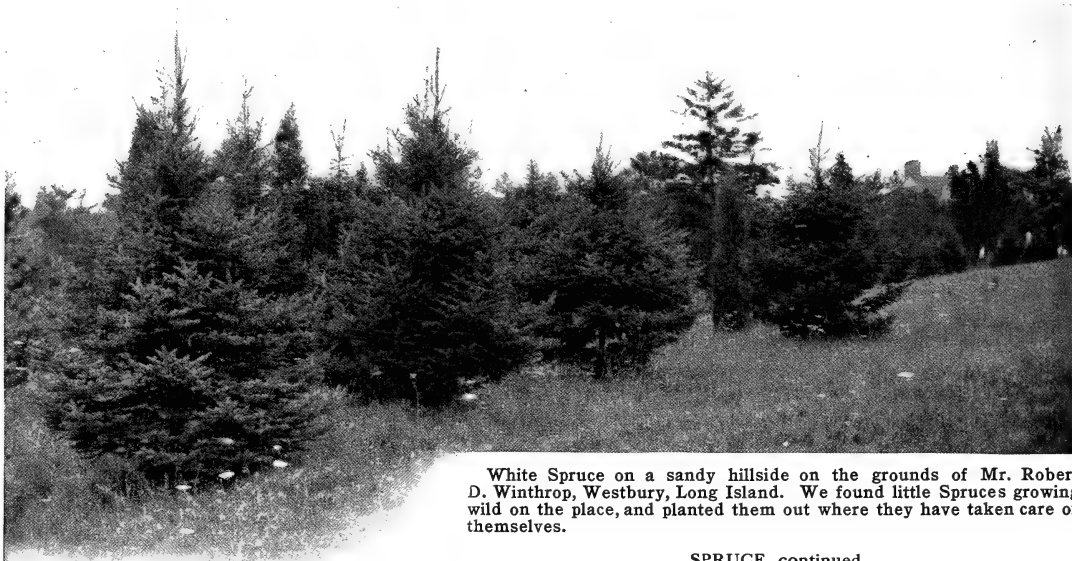
Ball of earth too small. Such a tree is liable to make a very short growth the first year, or it might possibly die unless carefully watered. For trees of this size, we use canvases of our invention which clamp and hold together a much larger ball of earth.



White Spruce, 2 to 3 feet high, in our nurseries. These were transplanted in July, 1910, during a severe drought. They are perfect plants with the best possible root-system



EVERGREENS



White Spruce on a sandy hillside on the grounds of Mr. Robert D. Winthrop, Westbury, Long Island. We found little Spruces growing wild on the place, and planted them out where they have taken care of themselves.

SPRUCE, continued

Norway. *P. excelsa*. This quick-growing pyramidal evergreen is suitable for hedges and mass-planting for windbreaks. To attain its best growth, it needs a damp, fertile soil sheltered from severe winds. To keep it from getting open and ragged, it is best to keep

it cut back, which can be done at any time of the year, but preferably in May and June, by taking off the tips of the longest growths. This causes the side buds to grow the next year, making a dense mass of foliage.

Dwarf Conical. *P. excelsa*, var. *conica*. Of dense, symmetrical outline suitable for formal planting.

Maxwell's Dwarf Norway. *P. excelsa*, var. *Maxwelli*. This makes a dense, button-shaped mass of dark green foliage about 2 feet high and 3 feet broad, fitting it for evergreen bedding. It grows very slowly, and will retain its small size as well or better than most others.

Remont's Dwarf. *P. excelsa*, var. *Remonti*. Another dwarf Norway Spruce as compact and slow as the Maxwell, but keeping the conical shape of the Spruce.

Alcock's. *P. bicolor*; syn., *P. Alcockiana*. This is bluer than the Colorado Blue Spruce on the underside of the foliage. This character is shown best when the sun is low, as in the winter or at the ends of the day. It should be used to give a touch of light foliage to groups of other evergreens.

Oriental. *P. orientalis*. This is the best dark green Spruce. It exceeds in its dark color the Nordmann's Fir. The foliage remains seven years, therefore it is dense. There are old specimens on the entrance drive at the residence of Mr. Clarkson Cowl, at Great Neck, Long Island, 50 feet high, in perfect condition, while the Norway Spruces alongside are ragged and thin.

Koster's Colorado Blue. *P. pungens*, var. *glauca Kosteri*. This is the most widely known of the Spruces, because of its conspicuous color. Many call for it who know none of the other evergreens. It presents a very strong contrast to all its surroundings, and by some it is considered not in good taste because of its lack of harmony. The color is a pale blue over sage-green. The plants are grafted in Holland and grown several years.



White Spruce with Colorado Blue Spruce in the border. This group forms a windbreak northwest of the residence of Mr. Charles Steele, Westbury, Long Island. It is best to plan such groups with the trees close together, because they make a more efficient windbreak and grow more rapidly. They should be thinned out before the foliage touches. It is a simple operation and needs only a little foresight to mark trees and arrange for the disposition of them beforehand. The work can be done either in August and September or during the winter or spring.



Hedge of White Spruce at Maxwelton, Glen Cove, Long Island. Such a hedge costs but little more than Privet. It will be valuable all winter, shutting off the view and the wind. An evergreen hedge is far richer in appearance than any other enclosure. This is the time to get White Spruce in quantity at low rates.

SPRUCE, continued

Colorado Blue. *P. pungens*, var. *glauca*. These are grown from seed, and are not so uniformly blue as the Koster's variety. However, the plants are better shaped, being broad and dense, while the Koster's are frequently irregular and more open when young. We have grown large quantities from seed and carefully selected out the bluest specimens.

Colorado, Medium Blue. *P. pungens*. These are the selection next the above in degree of color, and are very handsome plants wherewith to make a pleasing contrast with other dark evergreens.

Colorado. *P. pungens*. These are those remaining after selecting the two preceding grades. Trees are of excellent quality. Color is a sage-green tinged with blue. Our plants are very broad and handsome. We recommend them for specimen planting. They will remain in excellent condition in the severest situations, on wind-swept hills or at the seashore.

Englemann's. *P. Engelmanni*. This is native in Colorado, and varies in color the same as the Colorado Blue Spruce. It can be distinguished from the Colorado Blue by the fact that the needles and the branches point upward, whereas with the Colorado Blue they are at right angles. It is claimed by some experts that it is a more valuable tree than the Colorado Blue Spruce, and in its native region it is handsomer in old age. We have on hand a large number of small plants, and we recommend those starting extensive plantations to use some of them.

Douglas. *Pseudotsuga Douglasi*. We consider this the best rapid-growing Spruce. The form native in Colorado which we have, is perfectly hardy. It grows more rapidly than any other



Japanese Yew and other dwarf evergreens. Plants next to the house receive the closest scrutiny. They should be of fine texture, dark and rich in foliage. They must cover the bare ground and yet they must not grow large too quickly. A planting from our nurseries filling these requirements. Residence of Mr. A. W. Connable, Hewlett, Long Island. Photographed two years after planting.



YEW, continued

Dwarf Japanese. *T. cuspidata*, var. *brevifolia*. This is a compact, dark green plant of irregular growth, which will ultimately spread 6 to 12 feet wide and 2 feet high. It is well fitted for evergreen bedding. Its picturesque growth fits it for planting in rocky situations.

It is more frequently used in planting at house foundations as illustrated on page 57. A little pruning will restrain its irregular tendencies and make compact plants like dwarf Boxwood.

Spreading. *T. repandens*. This makes a graceful mound of arching sprays. It grows about 1 or 2 feet high and 3 to 5 feet wide. It appears to be hardy, and well adapted for planting at the foundations of a house with other dwarf evergreens.

See illustration, page 54, where it borders a group of Rhododendrons and helps hold the leaf-mulch in place. We consider it a very valuable plant, and are growing it in quantity, but the plants are as yet small.

English. *T. baccata*. This does best where partially shaded from our brilliant winter sunshine.

Golden English. *T. baccata*, var. *elegantissima*. We have a number of old plants which have the venerable appearance of old Boxwood. They show their golden tinge on the new growth in summer, which changes to dark green in the winter. These plants are of a dwarf, compact habit and will make a most valuable addition to some garden where their venerable and elegant appearance would be appreciated.

Irish. *T. fastigiata*; syn., *T. Hibernica*. This makes a narrow pyramid 1 foot wide and 3 or more feet high. They are very popular for decorating formal gardens, but we cannot recommend them for permanent results in this region.

Canadian. *T. Canadensis*. This is native as a ground-cover in damp forests. It trails along the ground, taking root as it grows, the branches ascending about 2 or 3 feet. In time a plant will become fifteen feet wide. Like all the Yews, in the early autumn it is decorated with red, translucent berry-like fruit.



A hedge of White Spruce at Meadowbrook Park, Westbury, Long Island. This screens the service drive to the stable and is also a windbreak to the residence, garden and lawn. White Spruce will make a denser windbreak on a narrower strip of lawn than any other evergreen.

On the Hempstead Plains, there are thousands of residences that would be more valuable with such windbreaks and hedges.

SPRUCE, continued

Spruce. It approaches in gracefulness the Hemlock. Extensive tests have developed no bad features, and the oldest plants in cultivation remain in perfect condition. We have a large stock of plants suitable for extensive plantations where low first cost is a consideration. They grow so rapidly that their small size need not veto their use.

Douglas Blue. *Pseudotsuga Douglasi*, var. *glauca*. These are grafted plants which we recommend highly.

Douglas Blue, Selected Seedlings. These are selected from our large stock and include plants which will make a beautiful contrast with darker evergreens.

Tiger Tail. *P. polita*. Native in the mountains of Japan. This rugged and hardy tree has the largest and sharpest needles of all the Spruces. The color of the bark is yellow, making it distinct in appearance from the other Spruces. It is a worthy member of a collection of rare evergreens.

YEW · Taxus

Japanese. *T. cuspidata*. This species is perfectly hardy here, whereas the English Yew is usually brown in winter. In Japan it grows to be a tree 40 feet high. Under cultivation here it makes a pyramidal tree similar in shape to the Spruces and Firs. The stock is limited. We have sent it abroad to several growers so that it may become more common in the American trade. We look forward to the time when the Japanese Yew will serve the same purpose here as the English Yew in England. We are growing large quantities from seed, from cuttings and from grafts, and therefore have reserved many of our plants for stock from which to propagate.

There are many forms of this species. The form called *Capitata* seems to be the species, as it grows from seed. *Taxus cuspidata brevifolia glauca* makes a compact, low dome, 3 feet wide. That which we call "bush form" is an open plant, 10 feet high and equally broad, without upright leaders.



Bank covered with small Douglas Spruce. View in the garden of Mr. Stanley Mortimer, Roslyn, Long Island. Little evergreens are so cheap that they will cover banks cheaper than putting down grass, because they eliminate the frequent mowing.



Planting at the foundation of a house with deciduous shrubs. This is the quickest and least expensive way.

In the center, the white flowering shrubs are *Spirea Van Houttei* edged with *Stephanandra*. Next the road at the entrance is a large specimen of Japanese Barberry. On the left of the entrance is a group of Prostrate Privet bordering the road. All keep their foliage full and solid to the ground. We have large shrubs which give results like this immediately.

To keep such shrubs from becoming too large, it is best to cut the older branches off at the ground. This results in young, graceful shoots springing up from the base. If trimmed at the top only, they have a hard, unnatural surface and few flowers.

A planting of deciduous shrubs like this is the cheapest and quickest. Evergreens as shown on pages 32 and 35 and Rhododendrons on pages 56 to 60 are naturally more expensive, but give a richer effect, especially valuable in all-year-round residences.

Deciduous Shrubs



Althea and Hydrangea are the principal flowers in August. Our nurseries will show many other plants interesting at that season.

SHRUBS and trees are difficult to separate. The Shrubs usually have several stems coming out of the ground, and trees have one. The height of Shrubs may be up to 12 feet; trees are usually taller. Many trees can be grown as Shrubs, but are described among trees, as Andromeda, Birch, Dogwood, Magnolia, Flowering Crab, Hawthorn and Silver Bell. There are large-growing trees which can be allowed to have their lower branches spread at the ground. They then will shut out the view as completely as a belt of shrubbery. They are Beech, Birch, Wild Cherry, Dogwood, Larch, Linden, Liquidambar, Pin Oak, Laurel-leaved Willow.

We are growing Shrubs of good quality and offer them at low rates. They are dug as ordered, and have not been damaged or dried out by storage.

We have large Shrubs for mature effect, in several varieties; these have been transplanted when of large size, spaced 4 to 6 feet apart and pruned to symmetrical form. They are not the left-over Shrubs in an old block, crowded and with poor roots. These are especially valuable for planting about new residences, and make the most economical basal planting and screen for the service entrance.

For large areas of Shrub-planting, the best way is to take small plants, 2 to 3 feet high, and cut them off to about 6 inches. If the ground has been well fertilized, they will make broad, vigorous Shrubs in two months. In three years, they will have a mature appearance. Therefore, there is little to be gained in planting large Shrubs. To arrange Shrub-plantings, it is best to mark out the area and plow or dig the soil; plant the Shrubs from 2 to 6 feet apart, and keep the ground under them hoed.

ALTHÆA · Rose of Sharon; *Hibiscus Syriacus*

Tall, V-shaped shrubs with showy Hollyhock-like flowers in July and August. Colors range through red, purple, violet, pink and pure white. Some of the magenta shades are disagreeable, but that should not condemn the others. The narrow habit of the plant can be corrected by cutting back to make it bushy, or concealed by planting it in the background with lower shrubs to cover its bare stems. A pure white Althea, such as *Totus albus* or *Admiral Dewey*, is a beautiful object in the shrubbery. Some others have a broad red center showing little or no violet as they fade.



ARALIA

Pentaphylla. This shrub is valuable for its foliage. It has the color and texture of the California Privet. Probably it is native from the same climate in southern Japan. The habit of the bush is like *Spiraea Van Houttei*, arching gracefully. The white flowers are inconspicuous.

AZALEA

Flame. *A. lutea*; syn., *A. calendulacea*. This grows in the Alleghany Mountains. It has bright orange-red flowers in May. Bartram, the early botanical explorer, said the mountains looked as if afire, from the large quantities of these flowers. It is one of the parents of the Ghent hybrids and equals many of the varieties in size, form and color of its flowers.

Ghent. *A. Pontica*. These varieties are hybrids, chiefly the result of crossing *Azalea Pontica* with *Azalea lutea* and two other American species, *Nudiflora* and *Viscosa*. They exhibit very wide variation of form and color; single, double, and striped. Some are pure white with a broad pink band, others have also a touch of salmon in the center. Some are pure white, others deep red, and many varieties have the orange and other yellows prominent. They bloom in May just before the Rhododendrons, and are particularly appropriate in the flower garden for part of the boundary. They can occupy beds the same as Rose bushes. They are especially at home in some shaded woodland or on the borders of damp soil. They are not adapted for planting as a single specimen on the lawn because they do not maintain a dense mass of foliage during the summer as is required in such situations. In a large shrubbery planting, Azaleas may be interspersed for their beauty of bloom, care being taken not to allow more vigorous shrubs to crowd them out. If they occupy solidly a section of the planting, they should have a deep layer of leaf-mold added annually, and not allowed to suffer for lack of moisture, otherwise the foliage will look thin in the late summer. Ghent Azaleas are hardy. They should rank with the Rose, Rhododendron, Phlox,

AZALEA, continued

Lily, Peony, Gladiolus, Dahlia, Sweet Pea or the Iris. There is no reason why gardeners should not make a specialty of Azaleas as of other classes. They bloom before any of the others mentioned.

Come to our nurseries in May, to see why we recommend that you start an Azalea garden. It will be an inspiration to you, and you will realize, as never before, the wondrous beauty of form and color of these magnificent shrubs.

Pinxter Flower. *A. nudiflora*. This is the wild pink Azalea blossoming in the middle of May. It is found wild on Long Island in several places, especially on the sandy hills sloping to the north, with a spring at the bottom.

Swamp. *A. viscosa*. This is common in the swamps on Long Island, and bears white flowers in early July. It is the latest of the Azaleas to bloom.

Azalea arborescens. This species has flowers like the Swamp Azalea, but blooms in June. It makes a round, compact bush.

Chinese. *A. mollis*. The orange and yellow flowers of this are larger and more showy than the others, but they are not so graceful in their outlines, being broad and funnel-shaped. The dry, hot winds injure the plants in summer. They bloom before the Ghent Azalea, starting the last of April or the first week in May.

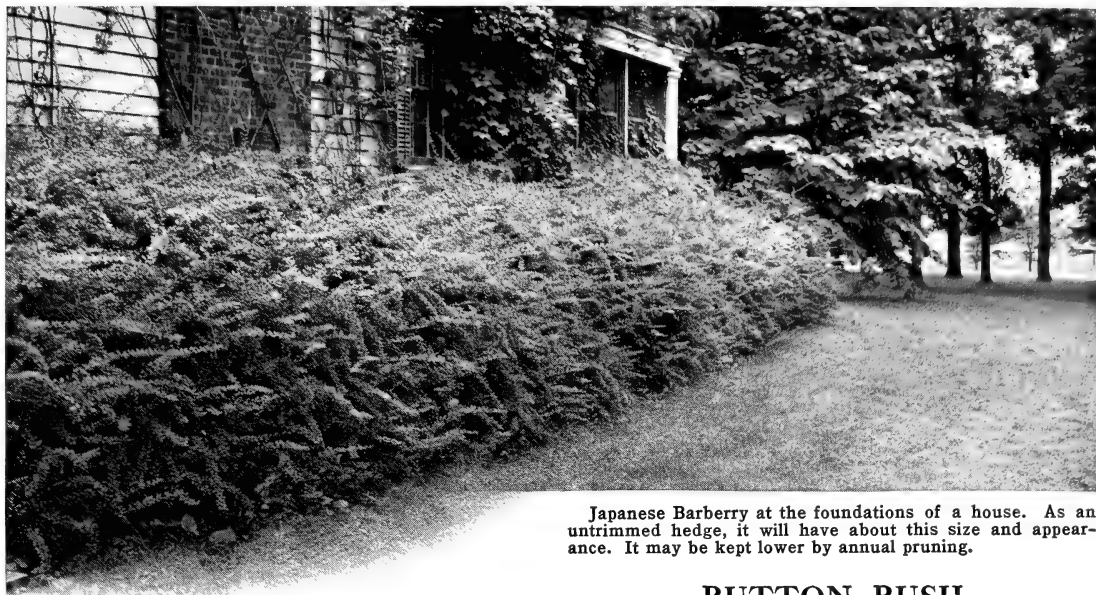
Yodogama. Large, double flowers of pale lavender. Very distinct from the other Azaleas.

Southern. *A. Vaseyi*. This we regard as the gem of all the Azaleas. It has broad, waxy petals of most delicate shades of shell-pink. It is so different from the others, so wondrously beautiful, and blooms so much earlier, that it should be included in all collections of Azaleas and Rhododendrons.

For *Azalea amæna*, and *A. amæna*, var. *Hinodegiri*, the two charming evergreen Azaleas which are objects of beauty all the year round, and bloom with the earliest shrubs; see Broad-leaved Evergreens, page 51.



A dangerous corner for automobile accidents, eliminated by moving back the tall Privet hedge and planting low Japanese Barberry. There are many other low-growing plants suitable for planting in similar places, which will stay low, such as Mugho Pine, Dwarf Japanese Yew, Spreading Yew, *Deutzia gracilis*, *Spiraea callosa alba*, Boxwood, Laurel and others.



Japanese Barberry at the foundations of a house. As an untrimmed hedge, it will have about this size and appearance. It may be kept lower by annual pruning.

BARBERRY · *Berberis*

Japanese. *B. Thunbergii*. This came into public favor more rapidly than any other shrub except the California Privet. It has several good qualities surpassing those of other shrubs, and it has no bad qualities.

It has the brightest coral-red berries, and they stay bright the longest, giving a cheerful touch to the dull landscape of March.

The foliage comes down more compactly to the ground than any other shrub, therefore it is extensively used for bordering taller groups of shrubs.

It stays small, and the other shrubs grow up tall behind it. In the autumn, the foliage is as brilliant a red as the flowers of the *Salvia*. Japanese Barberry is extensively used for hedge-planting, especially in the Northeast, where it was first introduced and where the California Privet is not hardy. As a hedge, it does not need trimming. It will make a dense, thorny barrier, 5 feet high and 7 feet wide.

Common. *B. vulgaris*. This European shrub has run wild in this country. It forms a tall, arching bush hung with long racemes of dark red berries in fall and winter.

Purple. *B. vulgaris*, var. *purpurea*. This variety has reddish purple foliage like the Purple Beech.

BAYBERRY · Wax Myrtle

Myrica cerifera

Along the sand-dunes and on the dry hills, the Bayberry springs up and makes the landscape beautiful with its rounded masses of glossy foliage. It should be used very extensively for such situations, because it will look contented and cheerful, while the majority of flowering shrubs will be wilted and sad. One lesson that the wild growth on Long Island can teach in landscape composition is the beautiful combination of rounded masses of Bayberry and the dark spires of Cedar. It needs some skill and patience to transplant it from the wild, but it forms a self-maintaining group. The round berries are covered with a white, aromatic wax used for candles.

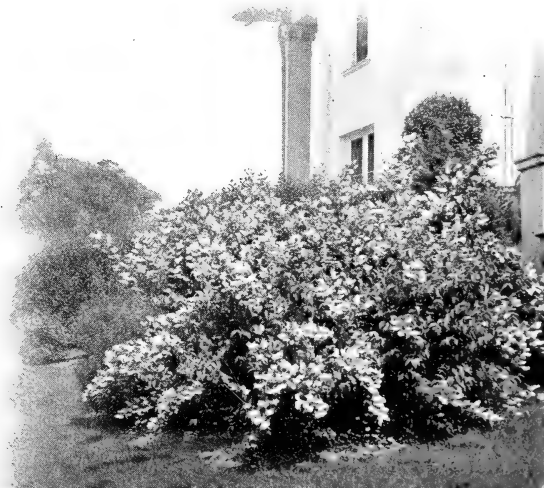
BUTTON BUSH

Cephalanthus occidentalis

Although this will grow in fresh water a foot deep, it likes dry upland better. It makes a round bush, 5 feet high, with heavy glossy foliage, decorated in July with clusters of white balls. We have a large stock of sturdy plants offered at such prices that planters can make a broad shrubbery at little expense.

CATALPA

Bungeii. Bush Form. *C. bignonioides*, var. *nana*. This is usually grafted high on a stem, making an umbrella-like tree. These we have grown as bushes. They have been cut back repeatedly, making symmetrical domes, in fact, they need cutting back or else they will become open and liable to split. They stand salt air well.



Deutzia crenata at the house foundations. Unless there is plenty of room it is too large and coarse for such a situation. It is better planted at a distance where a screen eight to ten feet high is required with lower shrubs in the front.



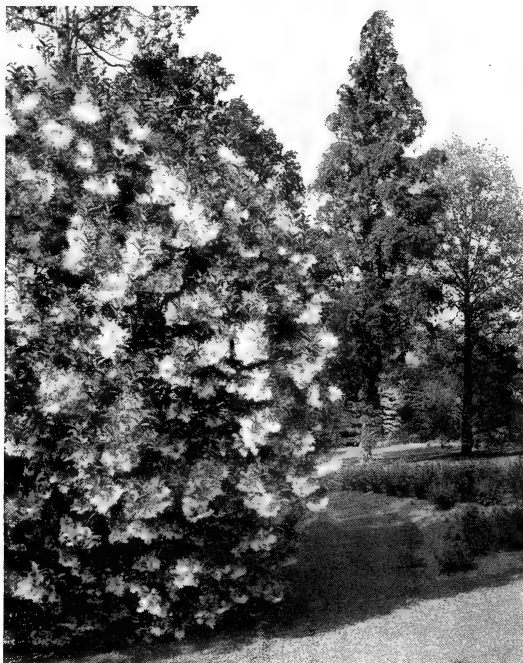
CHOKEBERRY

Aronia nigra; syn., *Pyrus arbutifolia*

A shrub growing 3 feet high on the beach, and elsewhere on Long Island among the huckleberries. It belongs to the Apple family, and has little white flowers in May followed by dark red berries in October.

CORCHORUS • *Kerria Japonica*

An old-fashioned shrub with orange flowers of globular form. The bark is bright green. Sometimes it winter-kills, but comes up thicker than ever.



White Fringe (*Chionanthus Virginica*). A big, dignified shrub with large, massive foliage. Several years ago there was a good crop of the grape-like seed, and we were able to grow a quantity. It is a comparatively rare plant worthy the consideration of planters. View on the grounds of Mr. John T. Pratt, Glen Cove, Long Island.

DEUTZIA

At the time of their blooming in June, the Deutzias are valuable and their tall, graceful shoots are laden with racemes of white or pink-tinted flowers.

Flore pleno. Double white flowers in long sprays.

Pride of Rochester. Double white flowers with a band of pink on the outside petals. The general effect of the bush is most charming when it is in full bloom in June.

Deutzia gracilis. A dainty little shrub covered with pure white flowers in May. It is sometimes forced for Easter. It is low-growing, similar to Thunberg's Barberry and can be used to border taller shrubs. The earliest of the Deutzias to flower. The flowers are suspended from small, graceful twigs, and are as dainty and graceful in effect as the exquisite flowers of the Lily-of-the-Valley.

Lemoine's. Dwarf in growth like *Gracilis* but more vigorous and upright. The flowers are white and borne in profusion. Valuable for planting in front of larger shrubs to hide their bare lower branches.

DOGWOOD • *Cornus*

Red-twigg. *C. alba*, var. *Sibirica*. The winter landscape needs brightening up, and this will do it in a wholesale way, especially in long belts of shrubs, not by the red berries that may turn dark or may be stripped by the birds, but by the brilliant carmine bark that proclaims itself a quarter of a mile away. It makes a shrub about 5 feet high, and will make the greatest show of color if one-half or all of the bush is cut down once every two or three years, so as to get vigorous young shoots. In June it has flat clusters of white flowers, followed by white berries in September. The foliage is good, and it is principally for its foliage, as a large, broad shrub, and for its winter color that it should be used, the flowers not being especially conspicuous. While its color is strong, it is a natural one, and one never feels that it is an inharmonious freak.

Cornus sanguinea. This has deep red bark of a darker shade than that of the Red-twigg. We offer some big, sturdy plants.

Yellow-twigg. *C. stolonifera*, var. *lutea*. This variety was recently discovered. It has clear lemon-yellow bark. Useful in the same way as the Red-twigg.

Cornelian Cherry. *C. Mas*; syn., *C. mascula*. A tall shrub with bright yellow flowers at the same time as the Forsythia, or Golden Bell. It is showy and has berry-like fruits in September.

Cornus officinalis. Identical with the Cornelian Cherry except that the flowers are earlier, it being one of the first conspicuous shrubs to bloom in April.

Flowering. *C. florida*. See page 7.

ELDER

Common. *Sambucus Canadensis*. Growing about fence-rows in both low and upland soils, this has white flowers in flat heads about 8 inches wide, followed by purplish black fruits. The foliage remains in good condition, and has no bad qualities. Because it is a weed is a good reason for using it in plantations of shrubs. The weeds that grow upon farm-land such as Cedar, Bayberry and Wild Cherry, make the best landscape material, because they keep in good health and make cheerful-looking masses of foliage under unfavorable circumstances.

Red-berried. *S. racemosus*. The Elder having the most conspicuous berries, which are borne in July and are brilliant red.

Marsh. *Baccharis halimifolia*. This grows where the roots are covered at every high tide. It is a shrub with gray-green foliage and conspicuous white down on the seeds in September. It belongs to the same family as the Dandelion.

ELÆAGNUS

Silver Thorn. *E. umbellatus*. A shrub for the seashore and sterile sands as well as for ordinary soils. It is heavily laden with juicy red berries. Travelers in Japan say that the children carry branches through the streets eating off the berries. The berries remain on all winter, and are favorites with the birds and chickens.

It has the ability to get nitrogen from the air, the same as Clover and Alfalfa. Plants growing near it are dark green, as if heavily manured. Elæagnus is a shrub needing plenty of room, for it will quickly grow 12 feet wide and equally high. It has fragrant, inconspicuous flowers. One of the objects of planting is to make attractive surroundings for our native birds. A cluster of berry-bearing shrubs gives them food and protection from hawks and winds.

Elæagnus longipes. A shrub of about 5 feet, bearing in July large cherry-like fruits about 3/4-inch long, with a currant flavor. When in full bearing it is an attractive shrub.

**EUONYMUS • Burning Bush**

Alatus. Cork-barked, or Winged. Bushes or small trees noted for their brilliant red fruits similar to the seeds of Bittersweet. For early autumn color this is unexcelled, and is much in demand by landscape planters who know its value. It will grow 10 feet high. In winter, the corked twigs are exceedingly ornamental.

EXOCHORDA • Pearl Bush

Grandiflora. The most showy white shrub of its season, early May. It has racemes of large, white flowers similar to those of the Mock Orange, or Philadelphus. An irregular shrub 12 feet high which had better be put behind others.

FORSYTHIA • Golden Bell

Fortunei. The Golden Bell is one of the most valuable introductions from China and Japan. Its flowers are the first conspicuous ones to bloom in the spring, with the possible exception of the Star Magnolia. From the middle of April the branches are hung with innumerable golden bells. Twigs may be broken off any time in the winter and put in water in the window, and they will bloom in ten days. It forms a vigorous, arching shrub, 8 to 10 feet high. Many of our plants have been cut to the ground to make them more bushy, and have sent up shoots 8 feet long in one year. It thrives in the open, and will do especially well in the shade. Very often where roads go through the woodland, it is very difficult to select plants that will thrive and harmonize.

Suspensa. This is almost identical with the former, except that the branches hang down, and sometimes, when the plant is old, it has a fountain-like appearance from the slender, vertical twigs hanging down 6 or 8 feet. This quality fits it for edging groups of shrubs, because it brings the foliage solidly to the ground, and no feature is more disagreeable in the shrub-plantation than to look through the shadows to the bare ground.

This Forsythia is excellent for covering steep banks and hillsides. It will do it more cheaply than grass and, if planted in a broad area, will make a feature to attract annual pilgrimages.

Viridissima. A broad, upright shrub with leaves of the size, texture, and color of the California Privet. We have seen the buds and twigs winter-kill once or twice in severe winters, which is never the case with the other Golden Bells.

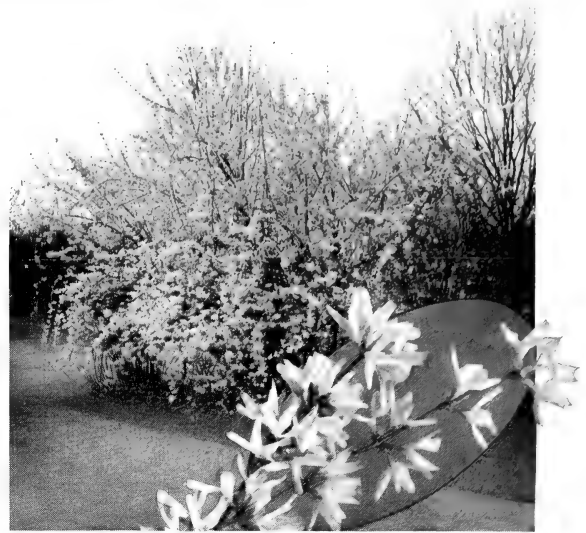
FRINGE

White. *Chionanthus Virginica.* The large leaves distinguish this from all other shrubs, being 3 inches broad, and 8 inches long. It makes a large shrub, or small tree, 15 feet high. The white "fringe" looks like delicate white lace hung all through the branches. It blooms in June. It can be used as a single specimen, especially in a grove of Magnolias, because its foliage and habit are similar. It is also a good shrub to rise out of the taller portion of a shrub plantation. It is native in damp ground from New Jersey southward.

Purple. *Rhus Cotinus.* This is related to the Sumach, but instead of panicles of red berries, has fluffy purple down looking like a puff of smoke. This makes an irregular shrub 10 feet high, conspicuous among all others from June to September.

HAZELNUT • Filbert; Corylus

American. *C. Americana.* Thousands of acres are covered with this bush, bearing delicious nuts. The chipmunks and mice get most of them, for they ripen in early September before most of us think of autumn nut-gather-



Golden Bell, or Forsythia Fortunei. The most showy low-priced shrub for early spring. It is always cheerful-looking.

HAZELNUT, continued

ing. Its value in the landscape is as a native plant under Oaks, Pines, Hickory and other trees. We often notice a sturdy growth of such trees rising out of a thicket of Hazelnut, Bayberry and Catbrier, whereas the same trees planted on a closely shaven lawn are starved. One of our ambitions is to popularize this type of cover-planting, believing that it will result ultimately in more beautiful and more economically maintained country places. A cheap way to establish a plantation of Hazelnuts would be to take our one-year seedlings and plant them in permanent locations, or in garden beds, 10 inches apart.

HERCULES' CLUB • Angelica Tree***Aralia spinosa***

In a shrub plantation this great shrub will be the quickest growing and most showy of all. Ailanthus-like stems shoot up, with leaves 2 to 4 feet long. These leaves are finely divided, giving the plant a luxuriant, tropical appearance. On top is a panicle of white flowers 1½ feet wide, followed by black berries. It grows 10 to 15 feet high. The stems are thickly clothed with very sharp spines.

UPRIGHT HONEYSUCKLE***Lonicera***

Tartarian. *L. Tatarica.* The Bush Honeysuckles are big, sturdy, upright bushes, and make a good appearance the year round. They will grow 8 to 10 feet high and equally broad. The Tartarian is the most common, having showy pink flowers in May, followed by translucent red berries in July. They look as tempting as currants, but have a bitter taste. One beautiful feature is their early green foliage, which vies with that of the Larch and Japanese Poplar, being two weeks ahead of other foliage. For this reason it is best to transplant them in the fall or before the middle of April.

Lonicera Morrowi. This is much like the former, but spreads more widely. Very useful at the base of groups as it grows thickly close to the ground. Flowers are yellow and white, in June.



Hydrangea paniculata præcox. This and the Tardiva have the same appearance. It is a sturdy, tall shrub, better adapted for general planting than the variety Grandiflora commonly seen, because it looks less artificial.

UPRIGHT HONEYSUCKLE, continued

Early Fragrant. *L. fragrantissima.* This seems to forget that winter is coming, and keeps bright green until midwinter. Like all the Bush Honeysuckles, it is especially good at the seashore. It has yellow flowers the latter part of April.

Fly. *L. Xylosteum.* This comes early in leaf, and has pairs of little pink flowers the last of April. It also bears clusters of bright red berries.

ST. JOHN'S WORT • *Hypericum*

Little shrubs 1 to 3 feet high, thickly covered with yellow star-shaped flowers in midsummer.

DWARF HORSE-CHESTNUT

Aesculus parviflora; syn., *Ae. macrostachya*

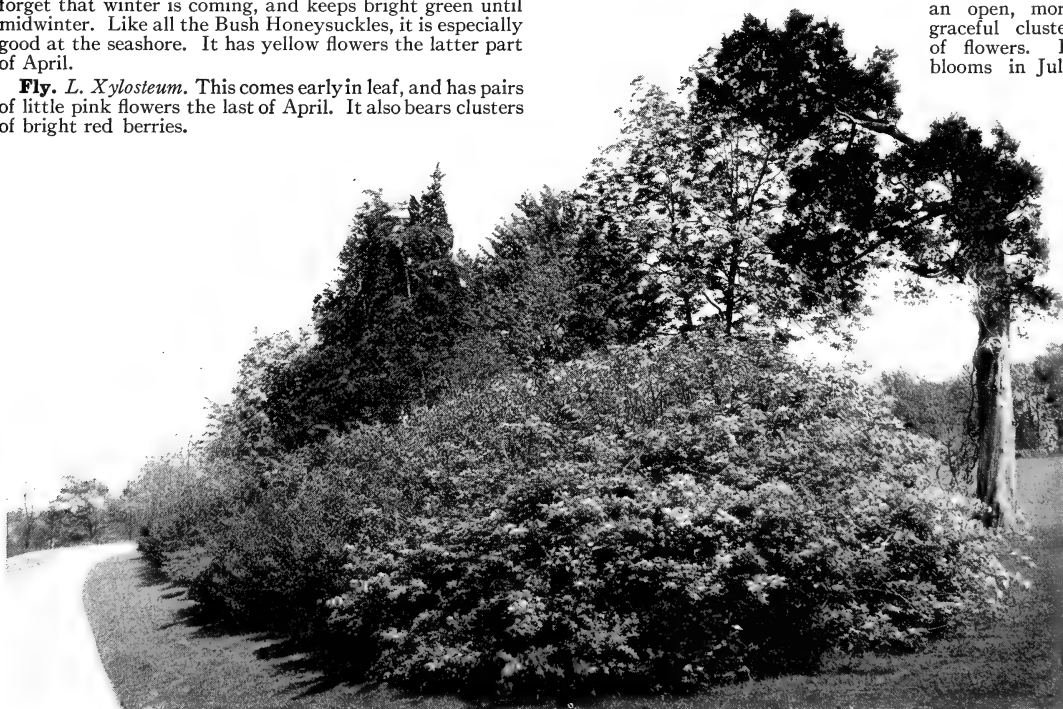
There comes a time between spring-flowering shrubs and the late summer shrubs (*Hydrangea paniculata grandiflora* and *Althea*), when there are no flowers in most shrub collections. This period is bridged by the Dwarf Horse-Chestnut, *Hydrangea quercifolia*, and *Hydrangea radiata*. The Dwarf Horse-Chestnut is a broad shrub about 7 feet high, with slender spikes of graceful flowers, 1 foot long.

It is a slow-growing shrub, and takes two or three times as long as other flowering shrubs to make a bushy plant 3 feet high. It is rarely offered by nurseries. We have a stock of small plants and recommend that a few of them be included in most shrub borders. The foliage is always healthy, whereas that of the large Horse-Chestnut on most Long Island soils becomes rusty in August.

HYDRANGEA

Hydrangea paniculata, var. grandiflora. This is the most showy shrub in August and September, with white, pyramidal flower-panicles 1 foot long and eight inches wide. It is perfectly hardy. The largest flowers are secured by rich ground and severe cutting back every winter. Plants may be cut to within 6 inches of the ground, or, if tall shrubs, the previous year's growth can be cut back to one joint. This permits but few shoots to grow; they receive all the food of the plant, and each is terminated by an immense flower-cluster.

Hydrangea paniculata, var. præcox. An early-flowering Hydrangea. The wild form of the former, having an open, more graceful cluster of flowers. It blooms in July



Upright Honeysuckle in the foreground. Good planting to separate a lawn from a road in a residence park. It is less repellent than a stiff hedge and expresses more fully the ideals of the owner. The group is close to a few old Cedars that were there, and under them have been planted the native Laurel, White Birch and Bayberry. To them have been added a few cultivated shrubs to add height and dignity.



Berries of Indian Currant. No red-berried shrub is more profuse.

HYDRANGEA, con.

when there are but few flowers in the shrubbery. There are some people who regard the variety *P. grandiflora* as too showy and a bit commonplace. They will be pleased with this variety.

Hydrangea paniculata, var. **tardiva**. This is similar to the *Præcox*, excepting that it blooms later, flowering with the *Grandiflora*.

Hydrangea arborescens sterilis. This is a new sterile form of an American Hydrangea. The flower is a hemispherical "snowball" in July and August, and the shrub is worthy of wide popularity.

Hydrangea radiata. Another native species, growing about 8 feet high, with flat heads of flowers in

July. The underside of the leaves is white.

Oak-leaved. *H. quercifolia*. Has large leaves shaped like those of the Red Oak, and bears panicles of flowers in July, making it a unique plant. Slow to propagate, and nurserymen have but few of them.

BLACK ALDER

Ilex verticillata

One of the brightest red-berried shrubs, frequently found growing wild on abandoned hillsides and swamps. It is an upright shrub, 8 feet high, with black bark. The twigs are thickly and closely covered with brilliant red berries. It is often used, mixed with Holly foliage, for Christmas decorations. In this way the foliage of many non-berry-bearing Hollies may be used. Only part of these shrubs have berries, therefore it is best to plant ten or more in a group.

INDIAN CURRANT

Coral Berry

Symphoricarpos vulgaris

This grows about 3 feet high, and all the stems arch over to the ground, so that it is excellent for edging taller plantations. It sends trailers along the ground, taking root at every joint, therefore it is well adapted to holding steep banks. In September, the thickly crowded berries turn bright red, becoming darker as the winter advances, whereas those of Thunberg's Barberry retain their color all winter. It belongs to the same genus as the Snowberry, which has pure, snow-white berries, and the two form an excellent combination.

JAPAN JUDAS • Cercis

Cercis Chinensis; syn., *C. Japonica*. Before the leaves appear in early May this shrub has its twigs covered with crowded rose-pink, pea-shaped blossoms.

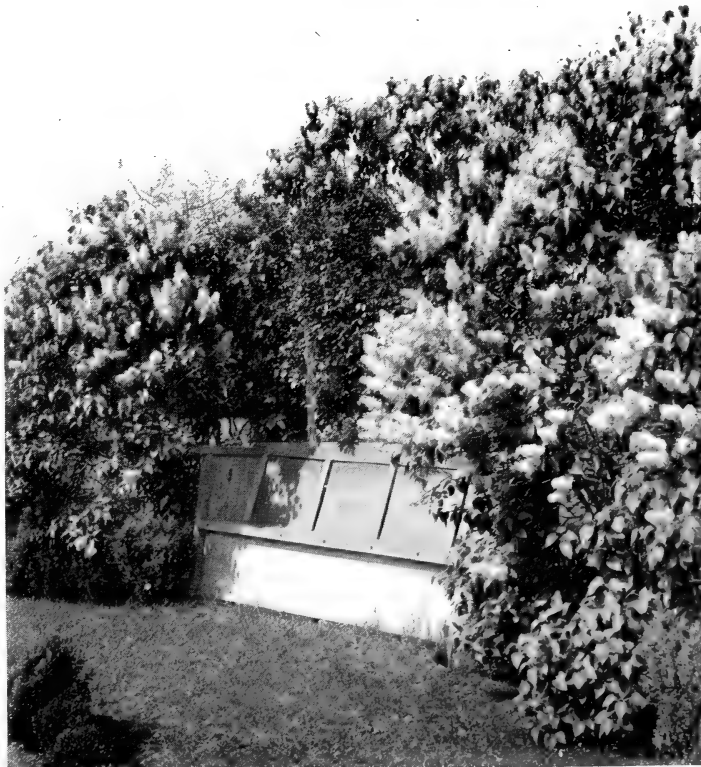
LABURNUM • Golden Chain

This appears as much a favorite in England as the Dogwood is here. Unfortunately, the Dogwood rarely flowers in England; but we are able to grow the Laburnum. The bark sometimes kills at the base of the trunk. This is avoided by planting between other shrubs. It is such a slender plant that it looks better when rising from other foliage. It grows 10 feet high. Early in May it is decked with long racemes of bright, golden yellow, pea-shaped blossoms similar in form to those of the Wistaria.

LILAC • Syringa

Common, or **Purple**. *S. vulgaris*. This will always be a favorite, probably because it is an old-fashioned flower with a perfume that cannot be forgotten. While it is not perfectly adapted to our climate, preferring colder summers, it always comes out with fresh beauty each spring. The powdery mildew whitening the leaves in late summer, or borers in the trunk, are not a serious handicap. It is an easy species to transplant. No one need hesitate taking up old plants which may occasionally be found around abandoned farmhouse sites, for these can be transplanted very successfully, even when in bloom.

White. *S. vulgaris*, var. *alba*. This has pure white flowers in early May, and can be distinguished even in winter from the Common, or Purple Lilac, by the lighter color of its buds.



Garden seat surrounded by Lilacs



DECIDUOUS SHRUBS

LILACS, continued

Persian. *S. Persica*. This has long, slender, gracefully drooping branches, bearing clusters of lilac flowers all along the sides. It differs widely from the Common Lilac, which has stubby branches and upright clusters.

Syringa villosa, var. **Emodi**. A sturdy, upright shrub, with white or pale lilac flowers blooming about two weeks later than the other Lilacs.

Named Lilacs • *Syringa vulgaris*

We have a large number of varieties which we have propagated on their own roots; therefore, there will be no trouble from the sprouting of the privet stock, and the sprouts which do come up will be of the same variety.

Ludwig Spaeth. Deep purplish red flowers in dense, large panicles. The best of its color.

President Massart. Red when in bud, purple when open, with large panicle.

Frau Dammann. This is one of the best white Lilacs, having immense panicles. Foliage is vigorous and healthy.

Insignis rubra. A large truss which is dark red when in bud and lilac when open.

Madam Jules Finger. Large, double, pink flowers.

Belle de Nancy. Flowers bright red, with white center. A new and distinct color; double.

Ville de Troyes. Large panicles of dark purple flowers.

Madam Lemoine. This we regard as one of the handsomest double white Lilacs, the individual flower being as large as a ten-cent piece.

President Grevy. Beautiful lilac-blue; very double flowers in extra-long panicles.

Pyramidalis. Panicles exceedingly dense; carmine in bud.

Madam Casimir Perier. A double Lilac, with large and compact panicles of the purest white. A new variety, highly recommended.

JAPANESE MAPLE • *Acer*

Acer palmatum. This family has contributed largely to decorating the gardens of this country. It consists of miniature trees, or large shrubs, which have won a place with the flowers solely by the charm of their delicate foliage. This is the wild form with green foliage. Early



The small, delicate foliage of the Japanese Maples is always attractive



Tartarian Maple. One of the few plants which lengthen the season of autumn color

JAPANESE MAPLES, continued

in autumn its foliage turns to brilliant carmine. Can be planted as single specimens or, better, in a broad group with the Tartarian Maple, Dogwood and *Euonymus alatus*. We have an exceptionally fine stock of bushy plants.

Blood-leaved. *A. palmatum*, var. *purpureum*. This, the Purple or Copper Beech, Schwedler's Purple Norway Maple, and Purple Barberry are the four most popular purple- or red-foliaged plants. Personally, we do not like them because they look like a brown blot in the landscape; but there are those who think they have not decorated their place unless they have planted an abnormal tree.

Cut-leaved Green. *A. palmatum*, var. *dissectum*. This makes a little mound of lace-like foliage about 2 feet high and 4 feet wide. The leaf is divided into narrow filaments less than 1/4 inch broad. There are places at the edges of shrubbery, particularly, or in the border of a flower garden where it is appropriate.

Cut-leaved Purple. *A. palmatum*, var. *dissectum ornatum*; syn., *atropurpureum*. This is just the same as the Green, excepting that the foliage has a reddish tinge as it comes out in the spring, fading to a dark green in midsummer.

TARTARIAN MAPLE

Acer Ginnala; syn., *A. Tataricum*, var. *Ginnala*

This is one of the best plants for autumn color in our nursery. It turns rather early in the autumn just after the Virginia Creeper and Dogwood change. The color is not excelled in clearness and transparency by any other autumn foliage. It quickly forms a tall screen, 12 to 15 feet high.

NEW JERSEY TEA

Ceanothus Americanus

Although wild on Long Island, few people know it. It grows in dry places, and makes a shrub about 1 1/2 feet high, with pretty little clusters of white flowers in June.



PHOTINIA

Villosa. A large shrub, bearing a profusion of white flowers in May and loose clusters of bright red berries in autumn. It is valuable both for its flower and fruit.

PRIVET • *Ligustrum*

California. *L. ovalifolium.* This is the most popular and the cheapest hedge-plant. The leaves are dark, glossy green. It is the only hedge-plant some think of, and they do not realize that anything else can be used. It will grow under a great variety of conditions, existing even in the dense shade of Maple and other trees. We are often asked as to what will make a screen in such situations, and we recommend that a reserve supply of Privet and other vigorous shrubs be kept in another part of the grounds and exchanged every year or two for those that are weak from shade and competition.

The best way to plant a Privet hedge is to dig a trench a foot wide and a foot deep, and place the plants 1 foot apart. By putting them 6 inches deeper than they were in the nursery, there will be several twigs coming out of the ground rather than a single stem, and there will not be a three-cornered vacancy between the plants. You will get the best hedge by cutting the plants back to 6 inches; therefore, it makes little difference whether you buy plants 1½ feet high or 3 feet high. Planting two rows 6 inches apart is frequently recommended, but it takes twice as many plants, which we think unnecessary. Three inches of manure may be put in the bottom of the trench and mixed in the soil before planting. A similar amount should be put on after the roots are covered.

Trim the hedge narrow on the top and wide at the bottom. Checking the growth at the top causes the sap to force out the lower branches. Many persons trim the hedge broad, with a flat top. This sometimes permits openings to remain at the base unless the hedge is growing very vigorously.

The fact that California Privet winter-kills on parts of Long Island is forgotten because of its quick renewal from the base. Winter-killing occurs at long intervals, and is most serious on young plants that have made a soft late growth in the nursery. The winter-killing is not serious near the ocean.

Ibota. *L. Ibota.* This resembles the California Privet in its upright, vigorous growth, but the foliage is not quite so large as that of the California. The foliage and bark are lighter in color, and the plant never winter-kills. This makes it useful for planting on the mainland north of New York.

Prostrate. *L. Ibota*, var. *Regelianum.* A variety of *Ibota* of exceptional value for shrub planting. Its branches extend horizontally, in the same manner as the Japanese Barberry; therefore its lower branches come close to the ground, and yet it will grow to be 6 feet high. It makes a good border to other shrubs.



A mass planting of tall deciduous shrubs against the porte-cochere with a border of *Deutzia gracilis*. The white flowers in the distance are the Japanese Snowball.

HARDY ORANGE

Citrus trifoliata

This is a true Orange, having globular yellow fruit, very sour and nearly filled with seeds. It makes a shrub 10 feet high, which is beautiful both when in flower and in autumn with its green bark and golden "golf-balls." South of here it is good for hedge purposes and makes a thickly interlacing mass of needle-tipped thorns almost impenetrable to the smallest animals.

BEACH PLUM • *Prunus maritimus*

On the high, sterile hills and on the beach, this shrub is native. It grows 10 feet high and equally broad. It has healthy, glossy foliage and small edible plums. It is valuable for seashore planting, and should edge groups of trees and shrubs on the sand-dunes. With it can be planted Wild Cherry, Privet, Black Oak, Pitch Pine, and other salt-resisting plants.



Beach Plum at Huntington Harbor. In exposed situations it spreads out close to the ground and holds the drifting sand



Spiraea Van Houttei. On the right, a stairway of sod and planks

Privet Trained in Formal Shapes

See also Plants for Formal Gardens, page 81

Ibota, Standard, or Bay Tree Form. We have worked seven years to get up a stock of these, of uniform shape. The base of the head is flat, being trained out on a hoop, as they are not stiff enough to hold their shape without it. These are valuable for decorating formal gardens and terraces, giving an effect very similar to the Bay Tree at less initial expense, and none of the deterioration which sooner or later, overtakes the Bay Tree, even when kept in a warm building over winter.

California, Standard, or Bay Tree Form. The larger of these are fifteen years old, and carry very dense heads of mature appearance.

Ibota, Pyramidal. These are trained up to symmetrical pyramids. Their place is in formal planting, courtyards, terraces, and flower-gardens, where the pyramidal Boxwood, Irish Yew and similar plants are called for. These will give the same effect in summer with no risk of winter-killing.

Ibota, Dome Shape. These have been cut back and can be kept in the shape of a hemisphere. They are suitable at the foundations of a new house or in a large formal plantation. If used in the shrubbery or in the hedge, they may be allowed to grow up and will make an extra-wide plant. The advantage of using this variety of Privet is that one need not fear that an extra-cold winter will affect it. It is hardy under all conditions.

California, Arches. Oftentimes over a gate at an entrance, between the laundry-yard, garden or stable-yard, an arch gives a finish and maturity not otherwise obtainable. A row of arches can be used down the sides of a flower-garden. We make the frame in parts, connected by a right and left coupling so that they are easily shipped and set up again.

JAPAN QUINCE

Cydonia Japonica; syn., *Pyrus Japonica*

We stopped growing this when the San José scale was serious, for it was a favorite host. The scale is now much less numerous, and Japanese Quinces are able to hold their own. Of course, the fruit trees on the place need spraying every year, and it is an easy matter to give the ornamental planting, liable to scale, a treatment at the same time, and it will result in more luxuriant growth of bush and foliage with a greater profusion of flowers. This advice includes the Double-flowering Crabs and the flowering Cherries.

RHODOTYPOS

Kerria

White. *R. kerrioides*. A shrub growing 6 feet high, with white blossoms like the Mock Orange and Exochorda. It is decorated in the fall and winter with large, shining black berries. It is a graceful shrub and would be used more if its merits were known, or if it possessed a common name.

RUBUS · Raspberry

Flowering. *R. odoratus*. Many are familiar with this growing along the ledges, with flowers like little single deep pink roses and followed by flat, sour fruits. It flowers all summer and is excellent to mix in the shrubbery.

SNOWBERRY

Symphoricarpos racemosus

A shrub growing 3 or 4 feet high, and most decorative in September and October, with snow-white berries about ½ inch in diameter. The numerous stems come up thickly from the ground, so that it may be used at the edge of shrubbery or on steep banks.



White Kerria (*Rhodotypos kerrioides*). The first blooms appear in early May and there are a few blossoms scattered throughout the summer. In the background the white spikes are Bridal Wreath.



SIBERIAN PEA TREE

Caragana arborescens

A sturdy tree smaller than the Dogwood, with clusters of pea-shaped flowers in May. It is very hardy, succeeding in Minnesota.

SPICE BUSH

Benzoin odoriferum; syn., *Lindera Benzoin*

A shrub native to damp ground, growing 15 feet high. In April when the Forsythia is in bloom, this has clusters of small yellow flowers along the twigs. In September it has bright red berries.

SPIREA • *Spiræa*

Snow Garland. *S. Thunbergi*. About the first of May, Thunberg's Spirea brightens the shrubbery with its fluffy mass of white flowers. All summer the tiny willow-like foliage is decorative, and is suitable for adding to bouquets. In autumn it changes to various shades of orange, red and yellow, and the bush is still effective in winter by the color and texture of its numerous ruddy, slender twigs. It is one of several shrubs to use in the foreground, because it arches over and brings its foliage to the ground.

Bridal Wreath. *S. prunifolia*, var. *flore pleno*. The tiny, double white flowers come about the first of May, before the leaves appear. Bridal Wreath is an old-time favorite, usually grown with the Lilac and Mock Orange.

Van Houtte's Bridal Wreath. *S. Van Houttei*. This is called the Bridal Wreath by some, and is a much better shrub. Its widely arching branches are loaded with a profusion of white bloom about the middle of May, making a brilliant show in the shrubbery.

***Spiræa rotundifolia*.** This continues the season of the bloom of the Van Houttei about two weeks. It closely



Japanese Storax. This is no commonplace shrub like Deutzia, Weigela or Lilac. All its qualities class it with the Magnolia, Rhododendron and Holly.

SPIREA, continued

resembles that variety, but does not arch quite so much. It should be planted near the other.

***Spiræa opulifolia*;** syn., *Physocarpus opulifolius*; *Opulaster opulifolius*. A big, coarse-growing bush suitable as a filler in large shrubbery. It will make a large shrub more quickly than any other. White flowers in June; pink seed-pods in August.

***Spiræa callosa alba*.** A little dome of white flowers 2 feet high and 3 feet broad. It blooms in June.

Anthony Waterer. *S. Bumalda*, var. *Anthony Waterer*. This is similar to the Callosa in shape of the bush and flowers. The color, however, is a bright rosy pink. It blooms later than the other Spireas, commencing in June and continuing throughout the summer. We complimented several persons on the bright effect of this in the dull season of late summer, and they replied, "Oh, you told me to cut off these flowers when they faded, before they went to seed, and get a new crop of flowers."

STAPHYLEA

Bladdernut

American *S. trifolia*. A vigorous, upright shrub, with clusters of creamy white flowers in May. We have some tall plants for the rear of shrubberies.



Shining Sumach in flower. The flowers are pale yellow in May and June. However, the flowers are not the valuable feature. It is the compact mass of shining, dark green foliage rising up from the ground that makes it valuable. It always looks in good condition.



DECIDUOUS SHRUBS

STEPHANANDRA

Flexuosa. A comparatively rare shrub to be used for edging, the same as *Berberis Thunbergi*, *Spiraea Thunbergi* and *Deutzia gracilis*. It has finely cut leaves and numerous arching, slender twigs. The creamy white flowers are not so valuable as the handsome, glossy, deep green foliage.



Sweet Shrub (*Calycanthus floridus*)

STUARTIA

Pentagyna. A rare shrub, with flowers like the old-fashioned Camellia. It is so choice that anyone would be proud to discover it blooming on his place. Through midsummer it has white flowers about 2½ inches in diameter, of a delicate silky texture. It will make a narrow, tree-like growth, 10 ft. high.

STORAX

Japonica. A rare little tree which we are glad to popularize. The branches spread gracefully and are hung with clusters of creamy yellow flowers, like orange blossoms in early June. The foliage is dark green, like Privet. The tips occasionally winter-kill, but not seriously. Grows to be about 12 feet high, and is splendid for use back of lower-growing shrubs, especially where its dark green leaves will accentuate the lighter colors of other foliage.



Syringa. Mock Orange or Philadelphia. A favorite of the bees. This is the shrub which blooms so profusely, in this section, around Memorial Day. It is valuable for the taller parts of groups of shrubs.

SUMACH · Rhus

Shining. *R. copallina*. A wild shrub, 3 to 10 feet high, with small, glossy leaves, smaller and more compact than the other Sumachs, fitting it for planting on smaller areas. It presents a dense mass of bright green, drought-resistant foliage, where many of the flowering shrubs look wilted. It may be distinguished by the wing along the stem between the leaflets. It has clusters of red berries in autumn and winter.

Smooth. *R. glabra*. A common shrub on Long Island, making a gorgeous display in autumn, when it has crimson and golden foliage with large clusters of red fruit. It is a large, open-growing shrub which can be cut back to keep it thicker.



Viburnum dentatum. If you wish shrubs of this size and appearance immediately, select from our stock of *Viburnum dentatum* and *Viburnum molle*.

Cut-Leaf. *R. glabra*, var. *laciniata*. Like the Smooth, except that the leaves are finely cut and fern-like.

Staghorn. *R. typhina*. This grows to a small tree which can be distinguished from the Smooth because the bark is covered with down like a deer's horn when in the velvet. It is rare on Long Island.

Fragrant. *R. aromatica*; syn., *R. Canadensis*. One of the few low, drought-resistant shrubs for dry banks and edging tall shrubs. It grows 2 to 4 feet high, with trailing stems. Has trifoliate leaves like the Poison Ivy, which turn to a brilliant red late in the season. In autumn it bears brilliant orange-red berries.

SWEET-SCENTED SHRUB

Calycanthus floridus

Sweet Shrub has almost as strong a hold on the affections as the Lilac. This is entirely due to the fragrance of the flowers which are about the size and color of a chocolate cream drop. The flowers retain their fragrance when dried. They appear in May and June. It makes a broad, vigorous shrub about 5 feet high, and can be used in a shrubbery and as a single plant in the garden or near the door for its delightful perfume.



SWEET PEPPER BUSH

Clethra alnifolia

Passing over damp ground in June and July, you have probably noted a distinct, honey-like perfume and traced it to the *Clethra*, with its finger-shaped spikes of white flowers. It is a shrub growing about 8 feet high which thrives well on the upland. The foliage is sometimes browned by the red spider. It is usually collected from the wild.

SYRINGA · Mock Orange

Common Mock Orange. *Philadelphus coronarius*. Another of the old favorites, with a fragrance that cannot be forgotten. It has garlands of large, pure white flowers on long branches. It is a graceful shrub, 8 to 12 feet high. Unfortunately, the common name for this is the same as the scientific name for the Lilac.

Large-flowered Mock Orange. *P. grandiflorus*. A large, vigorous shrub, with very showy, creamy white flowers in June.

TAMARISK · Tamarix

African. *Tamarix parviflora*. On the seashore this thrives much better than inland. It makes slender, waving plumes of Asparagus-like foliage. It has no leaves, in the ordinary sense of the term, but little scales like the *Arboretæ*. It is excellent to embellish groups of shrubs and trees at the seashore, for it will rise above them with waving plumes of minute pink blossoms in May.

VIBURNUM

Maple-leaved Arrow-Wood. *V. acerifolium*. A common shrub in shady woods, which it seems to prefer. It grows about 3 feet high.

Viburnum cassinoides. A graceful, arching shrub, with brown twigs and elliptical leaves.



High Bush Cranberry in early June

VIBURNUM, continued

Arrow-Wood. *V. dentatum*. We recommend this highly for mass planting. A big, sturdy, broad-shouldered shrub, growing 8 to 10 feet high. We have grown a stock of large plants that are very bushy and symmetrical. We recommend them highly where an immediate screen is desired. They hold their own when transplanted, and do not have to be cut back and grown on again.

Viburnum molle; syn., V. Nepalense. This is indistinguishable from the *Dentatum*, and we have plants the same size and quality. Some of them have been set out 6 feet apart in squares, to grow as large shrubs for immediate effect. It has flat clusters of white flowers in June a little later than the *Dentatum*.

Viburnum prunifolium. This ultimately grows to be a tree like the Dogwood, with black, sweet, edible berries.

Sheep-Berry. *V. lentago*. A Sheep-Berry similar to the preceding, with larger leaves. We have a few large, broad plants which will give mature results at once.

Wayfaring Tree. *V. lantana*. An European shrub with leaves whitish beneath, and bright red fruits in July and August, which later turn to black.

Viburnum dilatatum. We believe we have the best stock of this rare shrub. It is particularly valuable for its numerous, small, scarlet berries which will remain all winter on the branches. It makes a round, massive shrub with foliage as dark as that of the Privet.

High Bush Cranberry. *V. Opulus*. One of the best tall shrubs for red berries. It grows 8 to 10 feet high, with healthy foliage and handsome, flat-topped flower-heads, surrounded by a row of sterile blossoms. It has numerous clusters of red berries which are very conspicuous in the autumn and remain on all winter. It is native in the northern states and Canada, and thrives well here.



Viburnum dilatatum blossoming in June. Cream-white flowers contrasting with the very dark, dense foliage



DECIDUOUS SHRUBS

VIBURNUM, continued

Common Snowball. *V. Opulus sterile*. This is the old-fashioned Snowball. The bush is covered with big white balls of flowers about Memorial Day. The leaves are usually curled by an Aphis.

Japanese Snowball. *C. tomentosum plicatum*. The excellent foliage of this leads to its preference over the Common Snowball. It is a sturdy, broad shrub, always in good condition. It may be known by the leaves being ridged.

Viburnum tomentosum. A wild form of the above, with flat flower-clusters about 6 inches across, with sterile, white flowers on the outer circle. It is a very showy shrub of good quality.



Flowers of the *Viburnum acerifolium*

twenty feet. It is not a common plant in nurseries, but we have succeeded in working up a stock of excellent quality. It is a sturdy, dignified, Oak-like shrub, 10 to 15 feet high. It can be used in plantations of Oak, Pine, Dogwood and other trees, as well as in boundary plantations of taller shrubs. An opportunity to get these in large quantities at low rates is not often presented, and we would advise planters to take advantage of it.

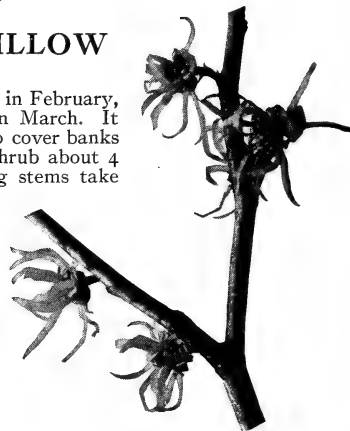
WEIGELA

One of the most useful shrubs on account of its vigorous growth and free-flowering habit. The bushes will grow 8 to 10 feet high and equally broad; the wide-arching branches are thickly clustered with pink bells in May and June. Colors of the different varieties range from white and pink to deep red, like that of the variety Eva Rathke.

JAPANESE PUSSY WILLOW

Salix multinervis

Earliest of all flowers, coming in bloom in February, while the other Pussy Willows bloom in March. It is suitable to plant in the shrubbery, to cover banks of streams, or at the seaside. It is a shrub about 4 feet high, but much wider because the reclining stems take root as they grow.



Witch Hazel. It has yellow strap-shaped petals which resist severe freezing. This makes the period without flowers to the Japanese Pussy Willow in February, a short one.

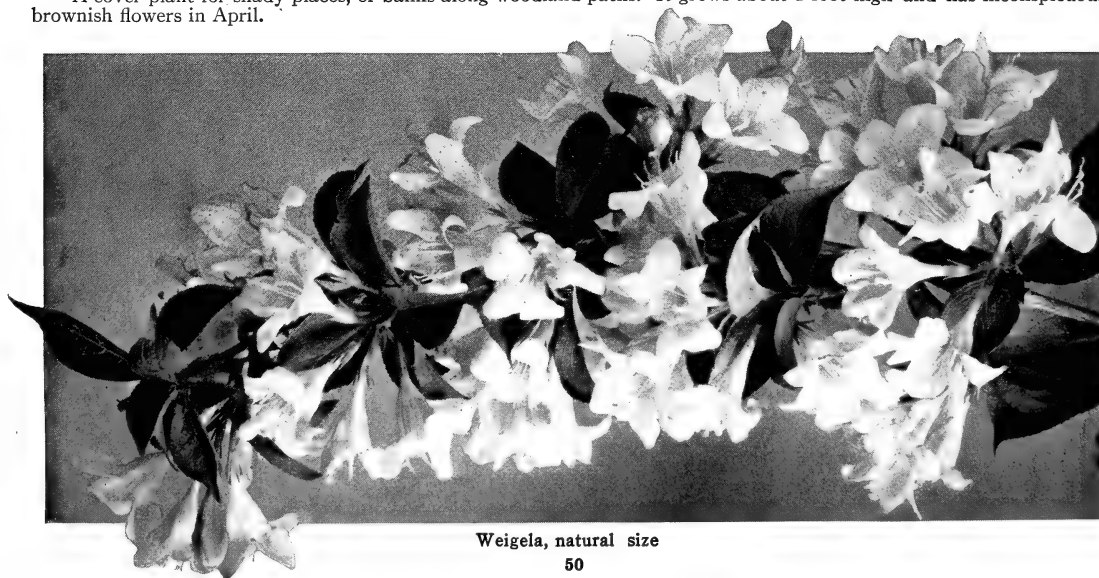
WITCH HAZEL

Hamamelis Virginiana

Latest of all flowers. It will bloom during November and until mid-December. It is pleasant to discover among the trees and shrubs, the spicy fragrance of these yellow flowers. At the same time there is a ripening of the seeds from the previous year's blossoms. As the pods open with a snap, they will shoot the seeds

YELLOW ROOT · *Xanthorrhiza apiifolia*

A cover-plant for shady places, or banks along woodland paths. It grows about 1 foot high and has inconspicuous brownish flowers in April.

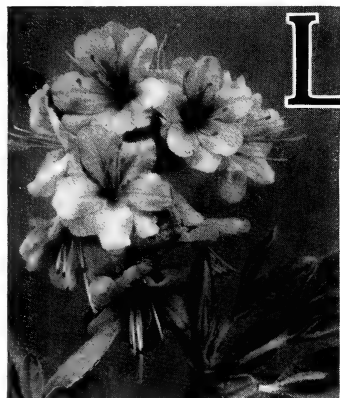


Weigela, natural size



Rhododendron Catawbiense Hybrids naturalized in the woods. This is the best way to arrange them in the woods, giving them plenty of room to display their undulations of light and shadow, and not crowding them in a close mass next the drive. As the plants grow near each other, they can be easily moved and made to decorate a wider area.

Broad-Leaved Evergreens



LIKE the Evergreens, the Broad-leaved Evergreens have not been used so much as they deserve. They have been imagined difficult to grow. They are not difficult; they merely want company. They want their share of the leaf-mulch. With the exception of the Yucca, they grow naturally in the forest, and prefer a little shade. Shade is not essential to their growth, but this will explain why you sometimes see the most luxuriant growth of Rhododendrons, Azaleas and other Broad-leaved Evergreens on the north side of a building.

They do not like the shade of trees which severely rob them, as do the Maples. Shade is more beneficial in winter than in summer, as it checks the evaporation by our brilliant sunshine in late winter, and, therefore, they are helped by any kind of shade from December till the middle of March.

We are testing all the types of Broad-leaved Evergreens likely to be hardy on Long Island, and should be glad to advise prospective planters how to obtain the best results with this important type of landscape material.

A little plant sympathy, which you can easily acquire, will give you mastery over a class of plants which all admire but which few grow.

ANDROMEDA • Pieris

Floribunda. A little gem of the Rhododendron and Laurel family, growing about 20 inches high, with light green foliage that is perfectly hardy. It appears as if in bloom all winter, for above the foliage are clusters of buds which open early in March with Lily-of-the-Valley-like flowers. It is particularly appropriate at the outer edge of mass-plantings of choice evergreens about the foundation of a house. It can also be used in the rock garden. It grows slowly, and the branches are so easily broken that it should not be planted where it is likely to be damaged.

Japonica. This has long racemes of Lily-of-the-Valley-like flowers which bloom so early that they are sometimes covered with ice and snow. It is liable to have the blossom-buds winter-killed unless it is in a sheltered place or wrapped with straw for the winter.

Catesbaei. See Leucothoë, page 55. For other Andromedas, see page 3

AZALEA

Amœna. Foliage-habit of this is like the Boxwood, except that it turns a purplish red in winter. Early in May it is covered with magenta-pink flowers. It is a splendid low-growing shrub which can be used with good effect in the flower-garden or for planting in front of tall-growing Rhododendrons or Mountain Laurel.

Amœna Hinodegiri. Most brilliant color of its season, early May. Color is bright carmine-pink. A new flowering shrub destined to become popular, as the flowers are brighter in color than those of Amœna.

Indica alba. An evergreen shrub with white flowers about 2½ inches across. It has been planted for many years in Greenwood Cemetery, Brooklyn. It suffers somewhat from severe winters, but is worthy of a sheltered place or artificial protection. It blooms about the middle of May.

For other Azaleas, see page 38.



Old Dwarf Boxwood moved by our tree-movers. Such plants are safely moved if taken with a sufficiently large ball of earth, but many have been damaged by moving with inadequate apparatus. We can send expert men and apparatus to move such plants. There is an abundance in the South which would thrive as well here as that which has always grown in the North. It is the same variety, and has not changed its hardiness as if it had been grown for many generations from seed.

Boxwood is a hungry, thirsty plant and dislikes drying winds and sunshine. Therefore do not expect it to thrive on bleak hill-tops as well as where it was nestled down in a valley beside a farmhouse. To make it thrive on the hill-top, prepare the ground with rich soil $2\frac{1}{2}$ feet deep, twice as wide as the plant. Mulch the ground every winter 8 inches deep with strawy manure. This will keep out the frost and permit the sap to come up all winter. If in a windy place, put evergreen boughs or corn-stalks around the plants from January 1 to March 10. This is easily held in position by a string or wire netting. Sometimes an old Boxwood has a branch turn yellow and die, because two years previously the bark was winter-killed at the ground. Sometimes the foliage becomes yellowed in the summer. Close examination will show little yellow lines on the leaves made by the red spider, a minute creature scarcely visible to the unaided eye. Red spider is not serious in a shaded situation. Gardeners say it can be knocked off by a strong stream from a hose.

BOXWOOD • BUXUS

Bush Form Tree Box. *B. sempervirens*. Boxwood will always be in demand. It forms a velvety dome of dark green. It is a native of England, and prefers a rich, moist, partially shaded situation. With freshly imported plants it is necessary to water them occasionally, otherwise the roots dry out. We have a large quantity that have been growing here one or more years so that they have larger balls of roots.

Bush form is the natural shape of Boxwood, growing about equal in height and width. The smaller sizes can be used for edging in gardens and will make more of an immediate effect than the Dwarf Boxwood, and will not get out of bounds, because it stands close pruning.

"When should Boxwood be trimmed?" is a frequent question. May and early June is the best time. The new growth can be evened up in August. Severe pruning in July results in a late soft growth which winter-kills. Rich moist soil and a little winter protection is all that Boxwood needs.

Pyramidal Form. *B. sempervirens*. These are trained as narrow A-shaped specimens, largely used for spacing at regular intervals in the flower-garden or planting in tubs for house or porch decoration. For illustration, see page 81.

Standard, or Tree Form. *B. sempervirens*. These have a straight stem and a globular head like a little Bay Tree, and are most effective used as tub-plants.



Andromeda floribunda. Behind it is a Japanese Yew. The border is Dwarf Boxwood



TREES FOR LONG ISLAND



BROAD-LEAVED EVERGREENS



Euonymus radicans growing on the trunk of a Locust tree at the residence of Mr. Thomas Hitchcock, Jr., Westbury, Long Island. It should be planted by the thousand this way.

EUONYMUS

Narrow-leaved. *E. radicans*. This is a plant which we are much interested in popularizing, because it so combines many excellent qualities. It should be used as extensively here as the English Ivy is in England. It will climb and cling fast and sends out long branches the same as the English Ivy. It is not slow in its growth, for in a few years it will become 20 feet high. If it has nothing to climb upon, it will make a dense evergreen mat, rising up in points about 2 feet high where the stems cling together. It is useful in this way on rocky banks and for bordering groups of broad-leaved evergreens. Our stock is grown from seed and is free from the occasional variegated branches seen on stock grown from cuttings. As there is not often an opportunity to buy this in large quantities, we recommend the careful consideration of this stock.

Broad-leaved. *E. radicans*, var. *vegetus*. This has round, thick, leathery leaves about 1 inch in diameter. It will make a branchy little bush 2 feet high, or it will climb like a vine. Most effective for use in front of taller evergreens, or for planting at the base of the porch where a low-growing plant is required. Even when small, it bears heavy crops of showy red berries like those of the Bittersweet to which it is closely related.

***Euonymus radicans*, var. *Carriere*.** A variety with a growth very much like the above, but having elliptical leaves, larger than *Radicans*.

BOXWOOD, continued

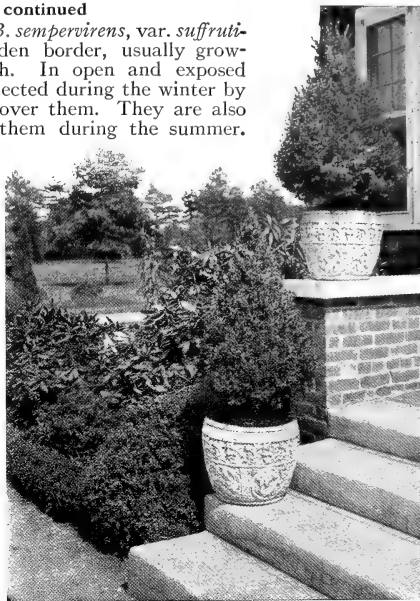
Dwarf Box (Box Edging). *B. sempervirens*, var. *suffruticosa*. The old-fashioned garden border, usually growing about 6 to 8 inches high. In open and exposed gardens these had best be protected during the winter by inverting a trough of boards over them. They are also damaged by flowers shading them during the summer. It is well, in establishing a Boxwood border to your flower beds, to plant a reserve supply to replace any that does not live, rather than depend upon the nurseries to supply it, as it is not always possible to procure it of the same quality and density as the plants in your border.

The old Boxwood around Long Island farmhouses is of this variety. It has a closer and more velvety texture than the Tree Box. In seventy-five years it grows 8 feet high.

DAPHNE

Garland Flower

***Cneorum*.** This is as worthy of affection as the Trailing Arbutus. It is a little rosette of evergreen foliage about 1 foot wide, bearing clusters of pink flowers in May and June and again in late summer. The fragrance is spicy.



Pyramidal Boxwoods in stone vases

HEATHER · Erica

The Heather of Europe has been found growing wild in New England, and there is no trouble to grow it here, if shaded by Pine branches or similar covering in winter. It is useful for bordering Rhododendron beds or the flower-garden. The attractive bells can be picked almost any time during summer.

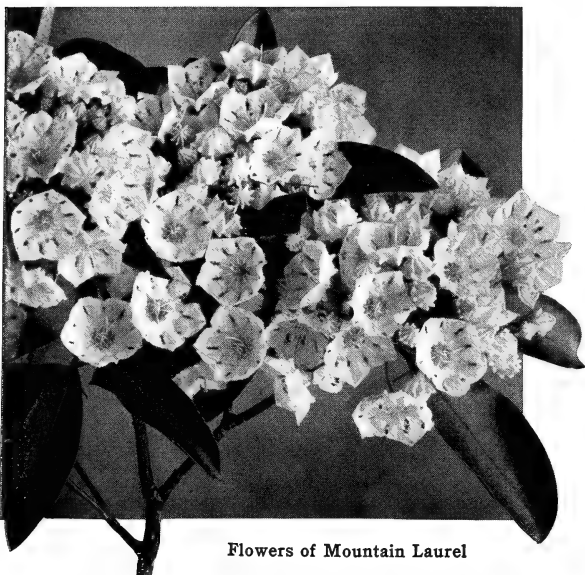
The fact that it grows in this country along the coast in low grounds shows that it likes a moist, equable climate. Many European plants thrive best in this country near the coast, as at Southampton and Newport. In winter the inland winds are dry; on the coast the winds are more moist.



Euonymus radicans clings closely to brick and stone and should be used by the thousand. It is perfectly hardy



BROAD-LEAVED EVERGREENS



Flowers of Mountain Laurel

HOLLY · *Ilex*

American. *I. opaca*. It is not generally known that the American Holly is native on Long Island, or that it is easy to transplant from the wild with short, bare roots, provided nearly all the tops are cut off, the leaves removed and the trunk wrapped with straw. Although the Holly prefers the thick woods and the vicinity of the sea, it will grow in any position. It is scarce in nurseries, and that is the only reason that it does not cheer up the fre-

HOLLY, continued

quently dreary winter landscape about American residences.

To get berries, it is best to plant several plants so as to have both the berry-bearing and the non-berry-bearing in a group. Holly should be planted both as trees and shrubs, even if you have to take little collected stubs bare of leaves. They will come along bravely and you will soon be surprised to see them growing 2 feet a year.

Japanese. *I. crenata*. A Boxwood-like plant, with glossy, dark green, little leaves useful for combining with mass-plantings of dwarf evergreens against the foundation of a house. They will try to grow 1½ feet a year, but the tips of the branches do not have time to ripen, and are killed back in the winter, but not enough to prevent it from becoming a handsome bush 2 to 4 feet high.

INKBERRY · *Ilex glabra*

An evergreen bush, 3 feet high, with leaves larger than Boxwood. It is native on the south side of Long Island on the edges of the swamps. It should be used as a ground-cover and in groups of low evergreens the same as Mountain Laurel. It has black berries.

MOUNTAIN LAUREL

Kalmia latifolia

Large areas of Oak forests on Long Island are covered with this beautiful shrub. It is perfectly hardy, making a compact shrub, 3 to 8 feet high. It comes in bloom with the later Rhododendrons, in the middle of June. It will thrive either in shade or in the sun, and is thankful for the addition of a little leaf-mold. Many get discouraged in collecting wild plants because they select plants with large tops that do not have roots enough. They get them from gravelly soils where the roots are long and coarse. It is best to dig small plants 1 or 2 feet high that have been burned or cut off recently. If the tops are cut back they



American Holly, with Rhododendron and *Taxus repandens*. Under the Holly the ground is carpeted with *Euonymus radicans*

**MOUNTAIN LAUREL, continued**

will come out thickly and be more certain to grow. Now that Laurel is available in large quantities at low rates, it should be extensively used for planting in the woods, about foundations of buildings and terraces, and under groves of young Pines and Oaks. The latter will make a particularly happy combination.

LEUCOTHOE

Catesbæi; syn., *Andromeda Catesbæi*. In shady places this is very decorative with its long, graceful, arching branches of foliage turning red and purple in winter.

HOLLY-LEAVED BARBERRY**Mahonia**

Mahonia Aquifolium; syn., *Berberis Aquifolium*. This looks like a little Holly, a foot or two high, except that the foliage turns reddish brown in winter. It prefers a shady situation. In fact, in full sunshine it is apt to get open and ragged.

Japanese. *M. Japonica*. This looks even more like a Holly, because the leaves remain bright green all winter. It likes to grow amid other shrubs or in the shade where it will please its owner by its sturdy growth. The leaves are about 15 inches long, and the leaflets are twice as large as those of the Holly, with strong, sharp spines.

MYRTLE · Periwinkle; Vinca

Trailing Blue. *V. minor*. This frequently has escaped from the old farmyards and spread along the roadsides. It is entirely hardy, and will make a thick green carpet under a growth of Pine, Spruce or Oak, but not where grass has died out under Maples. It trails along the ground, taking root as it spreads. It makes a mat of deep green foliage, about 4 inches high. With the coming of the first violets it has numerous blue flowers. It is sometimes used for garden borders. Every joint takes root, and a mat 1 foot wide can be shaken apart and will make two dozen plants.

White-flowering. *V. minor*, var. *alba*. Pure white flowers.



Leucothoe Catesbæi. The flowers are white bells in close clusters

PACHYSANDRA

Terminalis. An evergreen cover-plant, growing about 8 inches high. It has leaves as large as the Laurel, and is particularly at home under it and similar plants. In groups of evergreens about the foundations of a house, the sight of bare ground is particularly disagreeable. *Pachysandra* will make a close carpet, covering all the area because it spreads from underground roots. It is perfectly hardy and keeps a cheerful light green foliage all winter. It bears small spikes of inconspicuous flowers in early spring, which, while not adding to the beauty of the plant, are very attractive to bees.



Mountain Laurel at Wheatlands, the residence of Mr. E. D. Morgan, Wheatley Hills, Long Island. This is fully exposed to the sun and yet remains in good condition. However, the foliage is larger and darker in the shade of the Pine trees. This group clothes the base of a stone terrace wall 12 feet high.



Border of Rhododendron and Boxwood thirteen months after planting from our nurseries. With the large old plants we offer, results like this can be accomplished immediately

RHODODENDRONS, Catawbiense Hybrids



Rhododendron
Lady Clermont

RHODODENDRON characteristics, and their hardiness, we have carefully recorded for many years, noting particularly those varieties which come through the severest winters with least damage to flower-bud or foliage, and it is these varieties which comprise our list. When they have been blooming, we have studied with equal care the color, noting brightness and purity of shades. We have been several years working up a stock based upon accurate knowledge and persistent endeavor to get varieties of value in this climate. We now have 10,000 Catawbiense Hybrids which have been growing in the nurseries from one to ten years, ranging in age from three to twelve years. We will have 5,000 imported in the spring of 1912. The varieties we want are not extensively grown in Europe, and we can get but a few from each grower. In some cases we order them grown several years in advance.

We invite you to come to the nurseries between May 15 and June 15, to get acquainted with the full beauties of Rhododendrons. Take home the plants even in full bloom. A dozen or more can be carried in an automobile. Next day send for more to complete the group if

needed. A rich, rare planting of Rhododendrons is a valuable asset to a place. Send for our circular, "Facts about Hicks' Rhododendrons," showing many situations where they may be appropriately planted and how easy it is to succeed with them.

Lilies may be planted under Rhododendrons, enriching the effect of the bed by their

brilliantly colored, exquisite flowers against the rich green foliage in July and August.

The difficulties of culture are largely imaginary. Correct culture may be condensed to the term, leaf-mulch. Some persons say, "Oh, I have tried Rhododendrons, and they have failed." Questioning reveals that they have purchased them from department stores or sidewalk venders who buy the tender Ponticum varieties, or they have planted them singly in the grass where the leaf-mulch cannot stay and protect the roots from hot sunshine and dry winds.

E. S. Rand, in a book on Rhododendrons published in 1876, says, "They can be grown as easily as Lilacs, and bloom quite as freely. These plants are attractive at all seasons; in flower they are magnificent, in foliage they excel any evergreen."



CATAWBIENSE HYBRID RHODODENDRONS, continued

He further summarizes their cultural requirements: "Rhododendrons love moisture, both at their roots and overhead; and they dislike excessive sunshine. Their objection to lime limits their general cultivation to those parts where the soil is non-calcareous." Fortunately, lime will not trouble them on any part of Long Island, and where lime and clay interfere with their culture, this difficulty is overcome as follows: A bed of fresh soil free from lime should be placed over the level of the surrounding soil. If a hole or pit is made in the soil, and the fresh soil put in, the lime from the surrounding soil soon impregnates it. Leaf-mold will conserve moisture at the roots and keep the soil cool. The Catawbiense Hybrids will thrive in the full sunshine; showers are sufficient, on Long Island, to keep them in good condition. In full sunshine they set more blossom-buds than in the shade. In the shade they will grow a little more rapidly and the leaves will be slightly larger; they will also be free from lace-wing fly which sucks the sap from the underside of the leaves, causing them to be paler green. This insect is not serious, and is controlled by spraying the underside of the leaves in May and June with whale-oil soap or tobacco extract. Avoid planting in the shade of Maples, Elms and Lindens, which makes the ground very dry. Maples have numerous fibrous roots close to the surface just like the Rhododendrons, and the two cannot thrive in the same place at the same time. With Oaks, Pines, Locusts and many other trees without numerous fibrous surface-roots, the Rhododendrons are particularly happy, and the two get along better than either alone.

As soon as the flowers have completely faded, they should be removed, being careful not to pull off the leaves. Allowing the plant to produce seeds will interfere with the formation of flower-buds for the following season.

Many have been deterred from planting Rhododendrons because they did not know them as they did Lilacs, Roses, Peonies or Maple Trees. The name has not become a common one. They think they are a risky experiment, only suitable for the wealthy, under the care of skilled gardeners. They are willing to risk two and one-half dollars for ten Roses, but not five dollars for five Rhododendrons. The Rhododendrons are beautiful all winter and, with our stock, are just as certain to thrive as the Roses.

Rhododendrons According to Color

We have listed the varieties in series of colors, putting first on the list of whites, the purest white, next those tinted with pink, and at the bottom those tinted lilac on the edges. With the light reds or pinks, the first are the lightest in shade, and the last are the darkest. With the crimson and dark crimson, those in the first part of the lists are of lighter tints. In the list of lilac shades, the first are the lighter and more pink, and the last are red shaded with lilac and violet-red. Nearly all the red Rhododendrons have, upon close examination, more or less admixture of violet and some have a slight tint of yellow. The colors have been classified according to the Color Chart of the French Chrysanthemum Society ("*Repertoire de Couleurs*").



Screening the coal window is a problem for nearly every residence. The coal window cannot be at the service court because the furnace is not in the kitchen wing. The window is usually near the front door. Tall Rhododendrons nearly cover the window, and Dwarf Japanese Yew carpets the ground as high as the coal-chute.



BROAD-LEAVED EVERGREENS

CATAWBIENSE HYBRID RHODODENDRONS ACCORDING TO COLOR, continued

WHITE

Boule de Neige
Delicatissimum
Catawbiense album
Candidissimum

Madame Carvalho
Album elegans
Album grandiflorum

LIGHT RED, OR PINK

Mrs. C. S. Sargent
Henrietta Sargent
Lady Armstrong
Abraham Lincoln

Ignatius Sargent, syn. The Boss
Lady Clermont
Giganteum

CRIMSON

Charles Dickens
C. S. Sargent
Mrs. Milner

Kettledrum
Atrosanguineum
James Bateman

DARK CRIMSON

Caractacus
General Grant
Charles Bagley

Flushing
Henry Probasco
H. W. Sargent

LILAC

Roseum elegans
Amaranthinora
President Lincoln
Parsons' Gloriosa
Roseum superbum

Everestianum
Dr. Torrey
Parsons' Grandiflora
Anna Parsons

PURPLE

Purpureum grandiflorum, Kissena
Purpureum elegans

Catawbiense Hybrids According to Name

Abraham Lincoln. Excellent bright red variety; foliage hardy.

Album elegans. Tallest variety of all. It will quickly make a V-shaped plant 7 feet high. The general effect of the flowers is pure white. When they open, they are delicately tinted with lilac. The hardness of buds and foliage makes this one of the Rhododendrons that can be used in all plantations. It will harmonize with the pink, red and purple varieties.

Album grandiflorum. This is almost indistinguishable from Album elegans, and is equally valuable.

Alexander Dancer. Bright rose with lighter center; very large truss of large flowers.

Amaranthinora. Light rose flowers, shaded lilac.

Anna Parsons. Flowers violet-rose.

Atrosanguineum. The earliest red Rhododendron. It is through flowering May 25, before some of the other red ones commence. Our color notes say, "the red is similar to Weigela Eva Rathke."

Boule de Neige. Occupies the same position to other Rhododendrons as the Mugho Pine does to the large Pines. It comes down to the ground, like Japanese Barberry. It is a little hemisphere, about 1 1/2 feet high, of closely crowded, dark green leaves. It may be used for its foliage alone in the evergreen bed as at the foundations of a house. In grouping Rhododendrons, it is one of the best to bring the foliage down to the ground to cover the bare stems of the taller varieties and, what is more important, hide and hold in position the leaf-mulch. Rhododendrons should have 6 inches of leaves added each year, but many people are loath to put on leaves for fear they may blow out on the lawn. The flowers are pure white and bloom in the early part of the season.

Candidissimum. A hybrid of *Rhododendron maximum* and *R. Catawbiense*. White, slightly tinted with lilac when it opens, but fading to pure white. It is a hardy variety with good foliage, flowering later than most others.

Caractacus. A dark crimson Rhododendron which is very popular in the trade. However, we do not like it so well as some of the other varieties because it is a crimson-purplish flower, and the purple is more apparent when compared with other red varieties.

Catawbiense album. Good white variety; a broad, vigorous plant; the white flowers slightly tinted with pink.

Charles Bagley. Several times in our notes this is described as "good red." Many people wish Rhododendrons that will come under this description, and we are recommending this one. It has a fine truss of flowers.

Charles Dickens. One of the best bright red varieties, having red filaments in the center of the flower and red flower-stems. While the individual flower is not very

large, its color-mass is excellent. We recommend its extensive use where a red Rhododendron is wanted.

C. S. Sargent. Color nearly the same as the Charles Dickens. The clusters on the outside of the plant are not so full as the others, because part of the flower-buds do not open, indicating that it would be best to give winter protection.

Delicatissimum. This differs from most of the other Catawbiense Hybrids because it is a hybrid with the *Rhododendron maximum*. It is one of the best white varieties and blooms later than most of the others. Although listed as a white, its flowers are slightly tinted with pink. It has large, shining leaves, and the plant is vigorous and broad.

Dr. Torrey. The edge of the flower is distinctly tinted with violet, and yet the general effect at a distance is of a good mass of red. This presents an almost solid mass of color, showing that it is as floriferous as Parsons' Grandiflora.

E. S. Rand. Although this was named for the author who has tested and contributed the most to the literature on the Rhododendron, it is unfortunate that the flower-buds winter-kill, unless the plant is in the woods or protected. Color is bright scarlet, and the flowers are larger than those of Charles Dickens.

Everestianum. E. S. Rand, in his book, says, "For one Rhododendron, perfectly hardy, and which combines good foliage, fine flower and free-growing and free-blooming habit, select Everestianum." Many other authorities mention the Everestianum as the hardiest Rhododendron. It looks as if it grew up on a mountain-top above the timber line. It has a low, broad form characteristic of the vegetation in windy, cold situations. The flowers are beautifully fringed or crinkled at the edges. Color is a rosy lilac.

F. D. Godman. Crimson with a dark spot in the upper petal.

Flushing. One of the good varieties originating at Parsons' Nursery, Flushing. It is a dark crimson flower, with plant of very good form.

General Grant. One of the best dark crimson Rhododendrons, slightly darker than the Charles Dickens and, like it, worthy of very extensive planting. Foliage hardy.

Giganteum. A bright pink variety with dense, compact foliage. It is about like the valuable Roseum elegans, only a brighter pink. It does not set many flower-buds.

Henrietta Sargent. Bright cherry-pink; cheerful color. Plant is very dense and low, growing about 3 feet high and 5 feet broad.

Henry Probasco. Deep crimson flower with wavy petals.

H. H. Hunnewell. Rich red; very large flower; early variety and very showy.



TREES FOR LONG ISLAND



BROAD-LEAVED EVERGREENS

NAMED CATAWBIENSE HYBRID RHODODENDRONS, continued

H. W. Sargent. The darkest, deepest red. Color is especially conspicuous as the buds open. A tinge of yellow can be noted in the outside of the bud at the base, giving it a scarlet tinge. It is a late variety. Plant is upright and narrow in habit, and very hardy.

Ignatius Sargent; syn., **The Boss.** In color and size of the individual flower, one of the handsomest Rhododendrons. It is a cheerful pink or light red. The leaves are very large and broad, making a handsome plant.

James Bateman. Fine trusses of crimson flowers.

James McIntosh. Has large, broad foliage and red flowers, similar to Kettledrum.

J. R. Trumpy. Rosy crimson; late blooming. Named for the man who has done the most in this country in hybridizing and propagating Rhododendrons, the propagator at Parsons' Nursery, Flushing, Long Island.

Kettledrum. This flower is red in all its parts, both the filaments in the center of the flower carrying the stamens and the flower-stems. The plant has a wide-spreading habit and is rather open.

Kissena. Dark purple flowers. Plant compact, low and round, like Everestianum; foliage hardy.

Lady Armstrong. This is a favorite with us and we recommend it highly. It is a beautiful pink, with the center of each flower white. It is a vigorous-growing variety with hardy foliage and abundant blooms in large clusters.

Lady Clermont. This is distinguished from most other varieties by a large chocolate blotch in the throat of each flower. The general effect is a deep pink.

Lady Grey Egerton. Mauve, or silvery blush.

Mabel Parsons. Large trusses of rose-blush flowers.

Madame Carvalho. White variety with a tinge of yellow. This variety needs protection. Suitable for planting in the woods.

Mrs. C. S. Sargent. Beautiful, cherry-pink flowers with wavy edges. For foliage and massiveness of plant, one of the best. Not only grows rapidly, nearly equaling in height Album elegans, but it is broad and solid. The leaves are large and square at the ends and each leaf is diagonally twisted.

Mrs. Milner. In comparing the descriptions of various authorities, we find that four call this rich crimson. It has excellent foliage and makes a compact plant.

Old Port. Rich plum-color.

Parsons' Gloriosa. Large vigorous bush, good foliage and hardy flower-buds. Color is pink tinted with lilac, and the clusters are large. It is particularly valuable for giving a large mass of foliage and light flowers in the woods or on the north side of a building.

Parsons' Grandiflora. This was sent out many years ago by the Parsons Nursery at Flushing, and was considered one of the best Rhododendrons. In a large collection of varieties, it will appear as the most solid sheet of bloom. The flower-clusters are of medium size but more numerous than other varieties, and they are perfectly hardy; buds are bright red with a shade of lilac; habit is dense, round and full. For a group of hardy red Rhododendrons in exposed situations, this variety is to be recommended. While there may be shades of red which the most critical observers pronounce purer, still the general effect of a mass of this variety is excellent.

President Lincoln. Plants are almost indistinguishable from Parsons' Gloriosa, and these two varieties are excellent for massing against the house foundations or the borders of the woodland. Flowers are rosy lilac or rose-purple.

Princess Mary of Cambridge. Very distinct variety with a large center of white prolonged in a band of white in the center of each of the five lobes. The flower is a beautiful cherry-red, and excellent as a cut-flower.

Purpureum elegans. Our color notes say, "deepest purple; do not plant with the reds, or with red or orange Azaleas; plant with white or lilac varieties." It is a big, vigorous shrub, hardy and of excellent foliage.

Roseum elegans. The habit of this plant is excellent. It is a big, round, sturdy bush of dark foliage as shown in illustration below. The clusters of flowers are very large and full. For a large group of one variety, this is excellent. Color is rose with a lilac tint.

Roseum superbum. Rosy lilac flower like Roseum elegans; foliage good.

Sefton. Darkest of the red Rhododendrons; as the buds open, they are a dark maroon; the truss and flowers are very large.

Senator Charles Sumner. Flowers are rose and light purple.

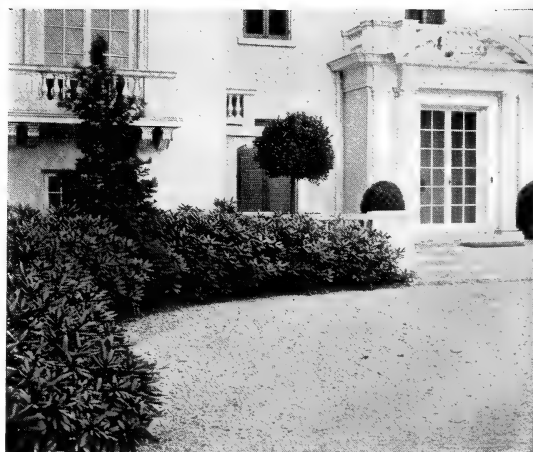
Scipio. Handsome rose-colored flowers with a deep rose spot on the upper petal; the foliage is excellent.

Rhododendron Catawbiense. The wild species growing in the high and more exposed mountain-tops of Tennessee and North Carolina. It has lilac-purple flowers in early June. The leaves are rounded at both ends, and most of the hardy hybrids show this character. The *Rhododendron Ponticum* has leaves pointed at each end. It is well to avoid such leaves, although they are not all tender; that is, if you are buying at a department store, or offered some at a bargain, and are not sure whether they are hardy varieties. If the leaves are sharp-pointed at each end, you may be quite certain that they are varieties of the *Ponticum* parentage and likely to be tender, for there is a demand for all of the hardy named varieties.

Rhododendron maximum

This is the species brought in by car-load lots from the mountains of Pennsylvania and the Catskills. It grows in valleys, preferably where the situation is moist and shady. The foliage does not keep in as good condition in the full sunshine as the Catawbiense Hybrids.

It grows magnificently in the woods on Long Island, and we have seen no such situation where it has failed to grow satisfactorily. It is not to be recommended, however, for planting under old Maple trees where the grass does not grow. Competition for moisture is too severe to permit permanent, satisfactory growth. Sometimes a concrete wall 4 inches thick and 3 feet deep around the Rhododendron bed will successfully keep out the Maple roots.



The foliage effect of Rhododendron is good the year round. Here, nothing could give a better connection between the entrance court and the severe lines of the house.



BROAD-LEAVED EVERGREENS



Yucca, or Spanish Bayonet. It seems almost to illuminate a dark corner in the evening

RHODODENDRON MAXIMUM, continued

Rhododendron maximum blooms the latter part of June and early July after the Catawbiense Hybrids have finished. The flowers are rosy pink, some nearly white and others deep pink. While it is in bloom the new shoots appear, so that the flower-clusters are not so distinct above the foliage as those of the Catawbiense Hybrids. The leaves of the *Rhododendron maximum* can always be distinguished, because they are twice as long as those of the Catawbiense Hybrids and are wider at the outer end.

We can supply *Rhododendron maximum* in car-load lots, and would like correspondence as to the sizes and prices. It is the cheapest way to get a large amount of broad-

RHODODENDRON MAXIMUM, continued

leaved evergreen foliage. The best way is to buy them by the hundred, taking as many as can be loaded in a car. On arrival, the balls of earth should be soaked and the plants be set in a shady situation, puddling the earth and packing firmly around the ball. It is best to water them during the summer. The open plants can be planted in the background or cut back.

Rhododendron punctatum

This is the third species native to the Alleghany mountains. An open plant slowly becoming 3 feet high. Flowers just before the Catawbiense Hybrids, with smaller clusters; rose-red in color.

Dwarf Rhododendrons, or Alpine Roses

These are compact little plants with the shape and density of Dwarf Boxwood. In May and June they are covered with pretty, little pink bells. They are suitable for planting near the edge of beds of Rhododendrons and other evergreens, especially when massed near the house-foundations. The species and varieties are:

Wilsonii
Arbutifolia
Præcox

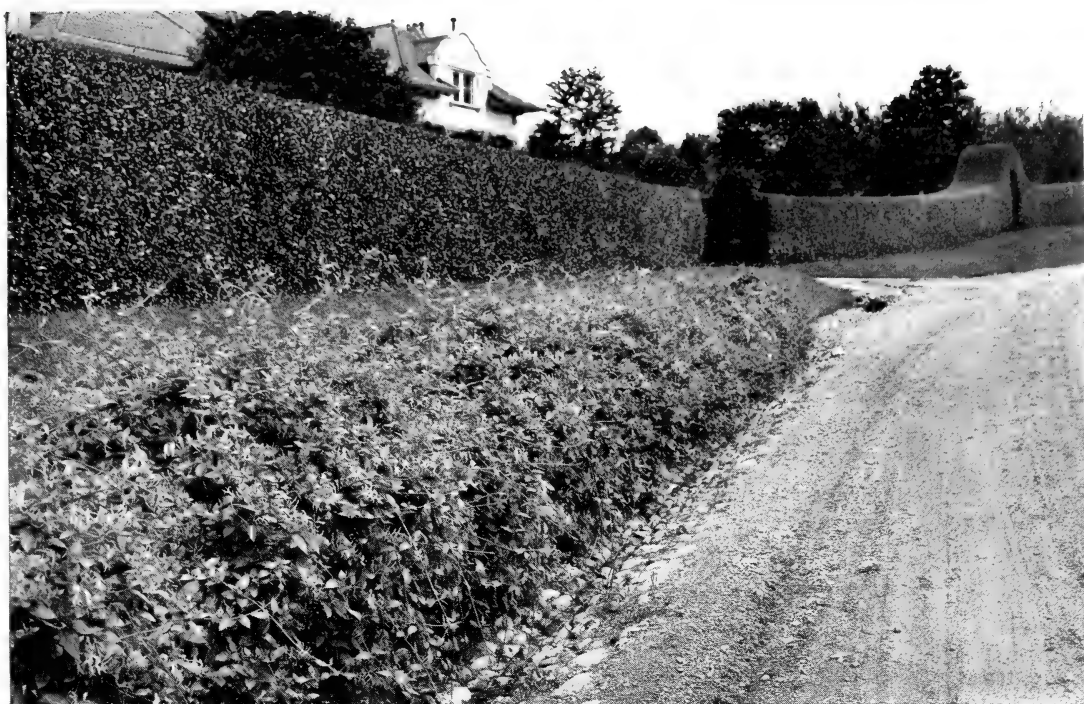
Myrtifolia
Ferrugineum
Hirsutum

YUCCA

Filamentosa. This may be classed as a hardy garden flower or as a broad-leaved evergreen. It belongs to the lily family, and is native from Maryland to Florida. It represents, however, a family prominent in the desert region of the Southwest. In winter it is a mound 1½ feet high, of broad, sharp-pointed, green leaves, giving it the name of Spanish Bayonet. In Mexico, some varieties have slender threads which can be pulled off with a sharp leaf point, giving it the name of Adam's Needle. It is perfectly hardy and delights in dry sandy situations. While it may recall the desert and not harmonize with other foliage, there is no reason why it cannot be allowed to predominate in some parts of the landscape. In June it sends up broad spikes 4 to 7 feet high of numerous white flowers. It is easily propagated from seeds or pieces of roots cut like potatoes.



Pachysandra terminalis. On the left, a Euonymus vine is clinging to the brick foundation. In the center, the Japanese Barberry fills a niche, and on the right is a tuft of Myrtle with leaves smaller and darker green than the Pachysandra



Japanese Honeysuckle hanging over the top of a stone wall, blossoming in May and again in October. Sometimes this is used to climb over a wire fence where it can either tumble naturally or it can be trimmed to resemble the Privet Hedge shown in the upper part of the picture.

Vines



Bittersweet

VINES were formerly used almost exclusively for planting about porches. Through lack of sufficient pruning, they grew too thick, checked the breeze, and mosquitos lingered where the breeze was not strong enough to blow them away. Vines on a porch should be severely pruned, and single canes only allowed to grow, trained at intervals of a foot or foot and a half. In the summer, the same idea is to be carried out, cutting away the foliage before it gets too thick. Then the vines will act as a shade and screen without stopping the breeze.

The uses of vines in the landscape are as varied as of any other class of plants. They quickly cover buildings, trellises, fences, pergolas, walls, stumps and bare banks of sand or clay. The laundry-yard and tennis-court may be screened by vines on a wire trellis. Many of them are attractive for flowers, foliage and fruit. They may be used to vary the occasional monotony of long stretches of shrubbery, when few shrubs are in bloom, by clambering over them, arranging themselves, in picturesque tumbling masses of brilliant foliage, flower, or berry effects.

Another use is for covering the ground under trees and shrubs. They are mutually helpful.

ACTINIDIA

Arguta. This Asiatic vine is as vigorous as a Wistaria, and similar in habit of growth. It has elliptical leaves about 5 inches long. The large, white flowers are like flowers of the Orange tree, Storax or Philadelphus. It has double fruit like the Gooseberry.

AKEBIA

Quinata. Another Asiatic vine, growing 40 feet high. It has dark foliage and inconspicuous brown flowers. The fruit is a big, lead-blue cucumber which splits open, showing a roll of tapioca-like, sweet, edible jelly.

BITTERSWEET • Celastrus

Celastrus articulata. The Bittersweet is the most conspicuous vine. The outside of the berry is orange, splitting open to show the scarlet seed. Showy all winter. Its frequent occurrence on tree trunks and thickets suggests its landscape use.

ARISTOLOCHIA

The Dutchman's Pipe

Sipho. Heart-shaped leaves 10 inches in diameter. The inconspicuous green flowers have a curious shape which gives it its name. A hardy vine with healthy foliage.



VINES

CLEMATIS

Jackmanni. Blue flowers $4\frac{1}{2}$ inches in diameter.

Henryi. Pure white flowers like the above in size.

Japanese. *C. paniculata*. One of the showiest of vines, blooming late in August. It makes a great snow-drift of white. It is a rampant grower, one vine covering a space 20 feet long and 10 to 20 feet high. It holds its fluffy, downy seeds until midwinter. It is one of the vines that has rapidly become popular because it advertises its own merits and has no faults.

EUONYMUS

Radicans. Also described under Broad-leaved Evergreens, page 53. There is a wide opportunity for this vine to make cheerful the winter landscape. It is perfectly hardy, appears to thrive both in the sun and in the shade, in damp situations and in dry.

The winter landscape can be made attractive by evergreen trees and the broad-leaved evergreens. Under deciduous trees and shrubs Rhododendrons and Laurel, Euonymus and English Ivy may be planted. English Ivy is not generally permanently successful in this section of the country.

Vines can be used in a thousand places not suitable for trees and shrubs. Have you a stretch of woodland along your entrance drive? Euonymus will clamber up the trunks and branch out widely, adorning it with its rich shadows and bright red berries. Have you a brick or cement foundation that makes a harsh line? This will help cover it and go up over the shingles as well. Have you a rough stone wall? Euonymus will delight in finding out its cracks and crannies. Have you a pergola interesting in summer with flowering vines? Euonymus will climb up underneath the Roses and



Wistaria multijuga. A rare species with flower clusters 2 to 3 feet long

EUONYMUS, continued

Clematis, and make it handsome in winter. Have you a bed of shrubs showing bare ground underneath? Euonymus will clothe the ground. You can get this Euonymus of us at very low rates and in large quantities, and now is the time to make a winter plantation.

Broad-leaved Euonymus. *E. radicans*, var. *vegetus*. This has leaves about twice as large as the *Radicans*, thick, solid and dark green. It is propagated only from cuttings. It was from seeds of this that we raised the *Radicans* variety, showing that the *Vegetus* is merely the fruiting branches of the *Radicans*.

LONICERA

Climbing Honeysuckles

Japanese. *L. Japonica*. A vine that has become entirely at home here, frequently running wild along hedge-rows. It is particularly attractive in winter with its semi-evergreen foliage. We are often asked what vine to plant for a quick screen, and we can recommend none better than this, for density and all-the-year usefulness.

There frequently is a steep bank or bluff to be covered. The Honeysuckle will make a dense cover, preventing washing and being beautiful all year. May be planted about 3 feet apart. This is much cheaper than laying sod.

In the suburbs of Philadelphia, Honeysuckle is frequently used for hedges, being trained on a wire fence. The flowers are very fragrant, and borne in great profusion in May; but they are especially welcome in late autumn after the frosts have killed most other flowers. It is excellent at the seaside.

Coral Trumpet. *L. sempervirens*. Coral-red trumpets all summer. It is not so rampant a grower as the Japanese, but so distinct in its brilliant flowers that it is worth planting among both vines and shrubs.



Clematis paniculata. We should like to suggest a new use for this in clambering over shrubbery. It blooms in August when the shrubbery looks uninteresting and this Clematis can make it appear as showy as when the *Spiraea Van Houttei* is in bloom.



IVY

English. *Hedera Helix*. This is worthy of planting, even if it does occasionally winter-kill. It thrives best where it is partially shaded. It is especially rampant near the sea and is often used with great success at Newport for garden borders.

The foliage is browned in winter by the sunshine. If on the south side of a building, it may be protected by a curtain of burlap. It is only at long intervals that the winter is severe enough to kill the vine itself. The English Ivy has associations that warrant its general use; but it cannot become as important in the landscape here as in England; that function can be performed by *Euonymus radicans*.

Japanese, or Boston. *Ampelopsis tricuspidata*; syn., *A. Veitchii*. A rampant-growing, hardy vine, clinging firmly to walls. Its rapid gain in popularity is the result solely of its merits. It stands city conditions perfectly. It needs only to be started in a crack in the pavement. The only objection is that it may cover the finer details of architecture, but semi-annual pruning will stop this.

KUDZU VINE

Dolichos Japonicus; syn., *Pueraria Thunbergiana*

The most rapid-growing of all vines, and when once established will grow 60 feet in a season, but dies back to about 10 feet. It has coarse foliage of three leaflets, like the lima bean, to which it is related.

LYCIUM • Matrimony Vine

This vine has foliage of a grayish green color and small, red, tomato-like berries in the fall. It is useful for covering a wall or rough bank, or in large areas of shrubs. It is a rather coarse vine, and is recommended for the more distant portions of the grounds as an economical filler.

TECOMA • Trumpet Vine

Radicans. A vine native to Maryland and southward, with showy orange trumpets in July and August. The foliage is always hardy. It clings closely to a wall or tree-trunk and will reach the tops of the tallest Locusts. It blooms at a time when there are but few shrubs in bloom. It may be introduced in shrub planting to clamber over shrubs or rustic posts.

VIRGINIA CREEPER

Ampelopsis quinquefolia

A native vine, distinguished from Japanese Ivy by having five leaflets, while the latter has three lobes or three leaflets. Poison Vine, *Rhus toxicodendron*, has three leaflets and white berries, and often grows with Virginia Creeper. It grows well on a wire trellis, on tree-trunks and will carpet sand-dunes.

WISTARIA

Chinese. *W. Chinensis*. This is the variety which has such a great profusion of blue-purple flowers in early May, before the leaves appear. It grows rampantly, and is subject to no serious insects or fungous enemies.

White Chinese. *W. Chinensis*, var. *alba*. Pure white variety of the former.

Double-flowering Chinese. *W. Chinensis flore pleno*. Instead of each flower being pea-shaped, it looks like a double violet, the petals being so closely crowded.

Japanese, or Loose-clustered. *W. multijuga*. This has flower clusters, 2 to 3 feet long, which are produced in May. It is yet rare in cultivation. Those possessing it will be delighted to exhibit it. The Japanese train it over bridges and tea-houses over the water.

Late-flowering American. *W. speciosa*, var. *magnifica*. This resembles the Chinese except that the flowers bloom the latter part of May after the foliage has appeared.

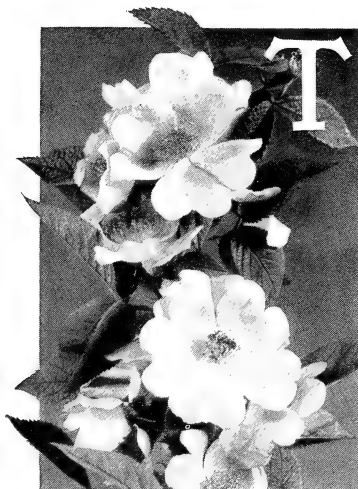


White Chinese Wistaria climbing over a rustic archway at a garden gate. Wistaria grows so rapidly that it is unsuited for houses unless frequently pruned. It can, however, be planted under trees along the borders of woodland and decorate them harmoniously.



Rose Garden. The variety in the foreground is Madame Gabriel Luizet

Hardy Roses



Prairie Rose

THE refined beauty of a perfect Rose cannot be surpassed by any other flower, and no garden is complete without them.

For the small garden, a selection may be made from the list given below, which has been chosen for beauty, hardiness and vigor of growth. For the larger Rose garden, many other varieties may be added, which we will procure.

The Hybrid Perpetuals produce their most abundant bloom in June with occasional blossoms during the summer and fall. The Hybrid Teas bloom continuously throughout the summer and fall until nipped by frost. This class embraces some of the choicest varieties, which will amply repay the extra care required in giving them the necessary winter protection. All Roses, even the hardiest kinds, such as the Hybrid Perpetuals and *Rosa rugosa*, are all the better for some slight protection in winter.

For the Rose garden a protected situation is preferable. The soil should be prepared by digging it 1½ feet deep and adding an abundance of well-rotted manure and bone-meal. The plants may be put 2 to 3 feet apart. Budded plants should be placed so that the joint is three inches below the surface of the ground. Press the earth down firmly over the roots. Prune closely, cutting off from one half to two-thirds of the tops. In summer keep the soil hoed deeply. In winter hill up the earth and add strawy manure 1 foot deep. In the spring cut off the dead tips and thin out the branches.

HYBRID PERPETUAL AND HYBRID TEA ROSES

Anna de Diesbach. Hybrid Perpetual. Carmine. A large, beautiful and fragrant Rose; plant vigorous.

Baron de Bonstettin. Hybrid Perpetual. Velvety maroon; one of the richest dark Roses.

Baroness Rothschild. Hybrid Perpetual. Delicate pink; large, full flowers, growing closely against the smooth, light green leaves; very choice and beautiful; not fragrant.

Olio. Hybrid Perpetual. Flesh-pink, shading to rose; flowers in clusters. A vigorous plant with good foliage, and a free bloomer; a distinctly beautiful Rose.

Francois Levet. Hybrid Perpetual. Cherry-red; a valuable Rose, from its strong growth and free-blooming habit.

Frau Karl Druschki. Hybrid Perpetual. The best hardy white Rose. It has long pointed buds, and splendid large, pure white blossoms; prolific and continuous in blooming; vigorous in growth.

General Jacqueminot. Hybrid Perpetual. Brilliant crimson. A vigorous plant, with abundant large fragrant blooms. One of the best known of all the hardy garden Roses.



ROSES

HYBRID PERPETUAL AND HYBRID TEA ROSES, con.

Gruss an Teplitz. Hybrid Tea. This has become very popular on account of its continuous blooming and brilliant, velvety crimson color. If you want to pick Roses any day until frost, plant a bed of Gruss an Teplitz. Fragrant flowers of moderate size, borne in clusters at the ends of long, vigorous stems. The foliage is good and the plant very hardy.

Jules Margottin. Hybrid Perpetual. Carmine-rose; grows to be a bush 5 to 6 feet high and wide, with luxuriant foliage and abundant blossoms.

Kaiserin Augusta Victoria. Hybrid Tea. An exquisite creamy white blossom, set off by rich, glossy foliage; vigorous and free blooming.

Killarney. Hybrid Tea. Delicate pink. The long, pointed buds open into large, loose flowers of exquisite beauty; a continuous bloomer; fine foliage.

La France. Hybrid Tea. Large; silvery rose blossoms of a peculiarly delicate fragrance; a constant bloomer.

Madame Caroline Testout. Hybrid Tea. Light salmon-pink flowers. Resembling La France, but more vigorous; free-flowering.

Madame Gabriel Luizet. Hybrid Perpetual. Silvery pink; a beautiful Rose; slightly fragrant.

Magna Charta. Hybrid Perpetual. Pink, suffused with carmine. The flowers are large and fragrant, borne on strong, light green stems.

Mrs. John Laing. Hybrid Perpetual. Large, soft pink, fragrant blossoms; very hardy.

Paul Neyron. Hybrid Perpetual. Rose-pink; the largest of all Roses; the stems are strong and smooth, and the foliage is bright, light green; a free bloomer.

MISCELLANEOUS ROSES

Hermosa. Bourbon-China. Bright rose-pink. One of the best of all bedding Roses, which blooms constantly from June till October. A small, compact plant.



Rosa rugosa. Worthy of a position amidst the best architecture, out on a rough hill-side or on the beach.

In the background are tall Cedars and a flat-topped Cedar hedge planted by our movers to separate the terrace from the service entrance. Residence of Mr. W. P. Thompson, Westbury, Long Island.



Rosa rugosa as a shrub is especially valuable because its foliage is always dark and solid and is never disfigured by mildew or insects. In the circle, Rosa rugosa, double white (Blanc Double de Coubert).

MISCELLANEOUS ROSES, continued

Crimson Baby Rambler. A dwarf Crimson Rambler, which grows about 15 inches high and blooms continuously throughout the summer. In midsummer the blossoms fade, but with the cooler autumn weather they regain their brilliancy.

Madame Cuthbush. One of the new Roses of the Baby Rambler class, having delicate pink blossoms shaded with rose.

Princess Adelaide. Moss Rose. Delicate rose-color. The buds are well covered with moss; foliage is dark.

Persian Yellow. A thorny bush with delicate foliage, bearing a profusion of small, bright yellow Roses clustered thickly along the branches. A favorite in old-time gardens. Very hardy.

ROSA RUGOSA • Japanese Rose

Roses are usually thought of as of value for their flowers only, their foliage being of doubtful healthfulness, and if unsightly in midsummer, they repay us by their beautiful flowers. The *Rosa rugosa*, *R. Wichuraiana* and *R. multiflora*, all from eastern Asia, bid fair to change all this. They are perfectly healthy in foliage, are handsome all through the summer and need no protection to prevent killing back in the winter.

The form of the *Rosa rugosa* bush is broad and rounded, 4 to 6 feet high and equally broad. It is solid and dense from the ground up. The foliage is dark green, shiny, and the leaves are rugose or ridged between the veins.

Rapid strides are being made by plant-breeders in this country and Europe in introducing new varieties with improvements in colors, size and doubling of the flowers.

The *Rosa rugosa* begins to bloom about May 15 and blooms again during August and September. A good way to increase the amount of this midsummer blooming is to cut back the plants nearly to the ground or half-way in the winter. Some can be cut back in June. This cutting back is beneficial, at least once in two or three years, to make the plants more compact. The red fruits are like little apples, about 1 inch in diameter, and are very showy, being in large clusters.



ROSES

CLIMBING ROSES

There has, perhaps, been a greater advance in Climbing Roses than in any other line of American horticulture in the last few years. Before the advent of the Crimson Rambler, about 1893, the Hardy Climbing Roses were mostly limited to the varieties of our native Prairie Roses — Prairie Queen and Baltimore Belle.

The *Rosa Wichuraiana* and *Rosa multiflora* have given us in the hands of M. H. Walsh, Woods Hole, Massachusetts, Jackson Dawson of the Arnold Arboretum, and others, a rapidly increasing list of decorative Roses as hardy as the Blackberry. The fundamental reason is that the Multiflora, Wichuraiana and the Rugosa are all natives of Eastern Asia, having a climate as variable as our own. Nearly all other Roses in cultivation are native to, or have been developed in, the equable climate of western Europe, and are subject to numerous leaf-troubles and winter-killing, making a Rose garden, unless skilfully attended, look sad after midsummer.

With the advent of the recently introduced Hardy Climbing Roses, it is possible for everyone to have Roses; in fact, it is the duty of everyone who has grounds to consider whether he can use Roses to make the world more beautiful. Formerly, the Rose was limited to the Rose garden and a few bushes about the house. Now, Roses can be used to clamber through the shrubbery, to cover the rough bank, to make hedges with or without the fence as a support, to cover railroad banks, bluffs and sand-dunes, even where the ground is bare of vegetation and to climb up tree trunks through the woods.

A few people have discovered some of these varied uses, and the fashion is bound to spread, because it is founded on plants which will harmonize with their surroundings and take care of themselves. You may have a piece of waste ground so poor that only the running Blackberries and Bayberry bushes try to cover it. Some of these Roses will grow as rapidly as the Blackberries, sending out trailers 15 feet long in a season. The cost need not deter you. They grow from cuttings almost as rapidly as Privet. Try some, and you will be surprised next year with long streamers of beautiful flowers followed by shining, healthy foliage and bright red fruit all winter. What more can you ask of a plant?

The season of Rose bugs on Long Island is from about the first of June to the first of July. Many of these Roses bloom outside of that season. At any rate, they bloom in such profusion and are decorative at such a distance that a few insects cannot mar your enjoyment. We see pictures of Roses in California embowering trees and houses with Roses growing here only in greenhouses. Now, we in the East can get the same effect by selecting the right kinds of Roses and giving them the proper care.

Rosa Wichuraiana. Memorial Rose. Single, cream-white flowers with golden stamens. The glossy, bright foliage forms a beautiful background to the profusion of white blossoms. Years ago we bought this new plant and told people its name and showed them its vigorous growth. The name deterred any possible investigation. In photographs by Bailey Willis, on a geological expedition in China, this Rose is seen clambering over the rocks. If left to itself, it will make an even carpet about 1 foot high, covered with little leaflets, thick and shining and resistant to all insects, fungous or climatic troubles. This carpet effect is new among Roses, and has not been utilized in landscape-planting. It will cover a terrace bank almost as smoothly as a lawn. It is especially at home on rocky or sandy banks, on the shore where it shows gratitude for the spray by continuing in bloom all summer. The following nine varieties are Hybrids of the *Wichuraiana*:

Dorothy Perkins. This has leaped into popularity as rapidly as the Crimson Rambler when first introduced. It has large clusters of double flowers of clear shell-pink. The foliage is healthy and glossy all summer. A steep bank can be covered more cheaply with these Roses than with grass, the plants forming an arching, tumbling mass of foliage, 3 feet high.



Climbing Rose, Dorothy Perkins. The perfectly healthy foliage of this makes it beautiful when not in flower

ROSA RUGOSA, continued

For seaside planting, the *Rugosa* is one of the very best plants, and offers an answer to the frequent question, "What can we plant besides Privet?" On road banks, in wild gardens, as hedges and borders, around flower-gardens and in almost any group of shrubs, the *Rosa rugosa* and its varieties are highly satisfactory.

Rosa rugosa rubra. Single; rose color.

Rosa rugosa alba. Single; pure white.

ROSA RUGOSA HYBRIDS

Agnes Emily Carman. Flowers brilliant crimson, similar to General Jacquemint; good foliage; vigorous and hardy.

Belle Poitevine. Semi-double; deep rose; true *Rugosa* foliage.

Blanc Double de Coubert. Large, semi-double, pure white flowers, and healthy, dark green foliage, like the type. This should be used extensively both in the Rose-garden or for mass planting.

Conrad Ferdinand Meyer. Silvery pink, double blossoms, resembling some of the best Hybrid Perpetuals; fragrant; the flowers are borne on tall, strong stems. One of the most valuable varieties.

Madame Georges Bruant. Delicate, pointed buds of cream-white, opening into large semi-double blossoms. The foliage is not so dark and vigorous as the other varieties and is liable to mildew.

New Century. Large double flowers, borne in clusters; color bright rosy pink.

Roseraie de l'Hay. A valuable new variety. The flowers are double, and bright cherry-red; a free bloomer and very fragrant.

Sir Thomas Lipton. Double, white, fragrant flowers. Very hardy and vigorous in growth, making it suitable to use for hedges and mass-planting, as well as for planting individually.



CLIMBING ROSES, continued

Farquhar. A splendid Climbing Rose with vigorous, glossy foliage, and bright, double, pink blossoms in large clusters.

Gardenia. The value of this Rose is in its beautiful, pointed, yellow buds and glossy foliage. When fully open the flowers are about 3 inches across, of a creamy white color and fragrant. This Rose is very vigorous, but the new growth is liable to be winter-killed and it needs protection, unless on a south bank.

Hiawatha. Single, bright crimson blossoms shading to white in the center, with conspicuous stamens; vigorous and free-flowering; very distinct.

Lady Gay. The originator of this fine Rose says that it is an improved Dorothy Perkins.

Pink Roamer. Single; pink with bright stamens.

Ruby Queen. An attractive Rose with double, deep, rose-pink blossoms, borne singly.

Sweetheart. Delicate pink, double blossoms, shading to white when fully open; foliage glossy and dark.

White Dorothy Perkins. A sport from Dorothy Perkins, which it resembles in every respect save in the color of the flowers, which is pure white.

Crimson Rambler. There is probably no Climbing Rose so well known and universally planted as this. It is perfectly hardy and exceedingly vigorous in growth, sometimes sending up shoots 15 feet high in a season. Its brilliant trusses of bloom make a glowing mass of color about the last of June. Its foliage, unfortunately, is subject to mildew.

Yellow Rambler. The blossoms of this are in clusters, yellow in the bud, cream when open.

Prairie Rose. *Rosa setigera.* This native climber is not so much used as it would be were its good qualities better known. Its long, graceful branches of light green foliage are crowned in July with open clusters of single pink blossoms. It is appropriately placed in the shrubbery, in the hedge-row or woodland border or against the trunk of a tree. It is the parent of Baltimore Belle and Prairie Queen.

WILD ROSES

There are several species wild on the sandy hills, roadsides and swamps that have a high landscape value and which should be used freely especially for covering large areas. They are easy to collect; simply dig them up and cut off the tops and the first year they will spring up almost as vigorously as Blackberries, to which they are related. They will make a solid mass of foliage and cover the ground completely, excluding weeds after they are established.

The flowers of our Wild Roses are mostly a delicate pink. They appear in June and are followed by bright red hips which remain during winter. The foliage of these Roses is good, the bark of the twigs is tinged with red, and therefore their winter effect is useful in the landscape because the twigs are so numerous as to give a distinct haze of color.

The fact that they make close thickets between the sand-dunes, and thrive even where drenched by salt spray, is a hint from nature to be followed.

Rosa nitida. An abundant species about 3 feet high, with reddish stems so thickly covered with prickles as to appear moss-like.

Rosa lucida alba. This Wild Rose is a white variety which has been extensively used in landscape planting. As its name indicates, the foliage is shiny.

Rosa humilis. The lowest of the Wild Roses, frequently growing under the Bayberries and Cedars on a dry, abandoned field. Grows from 1 to 3 feet high, and has usually one flower on each stem rather than several in a cluster.

Rosa multiflora. A big shrub that takes care of itself. Even without pruning it is in good order. It will clamber over a fence 10 feet high. The red fruits are a valuable winter decoration.

Sweetbrier. *Rosa rubiginosa.* Eglantine. The Sweetbrier Rose has a delightful perfume, especially on a dewy evening, and should be planted in the garden and near the house for that alone. It has become naturalized in the Cedar fields and roadsides of Long Island. There have been produced a number of new varieties known as Lord Penzance Hybrids.



Rosa multiflora on a road bank. This has innumerable clusters of small, single white flowers like blackberry blossoms. A sunken road like this in a residence park gives greater privacy and permits a larger number of residences. The banks are covered with shrubs, vines and low evergreens.



Phlox and Nicotiana in the garden of Mrs. Peter B. Wyckoff, Southampton, Long Island. The path is arched alternately with Roses and Red Cedar

Hardy Garden Flowers



Columbine (*Aquilegia chrysantha*), with long, graceful spurs

THE time is past for anyone owning a bit of ground to feel that for lack of knowledge of flowers, or lack of funds, he cannot have a garden. The point is, simply, give the flowers a chance to grow.

In planning a flower-garden, the first requirements are beds of a width for a hoe to reach the middle, or narrower, and paths. Whether they are straight or curved, symmetrical or unsymmetrical, is another question. The location of the garden is an important question of design. As to making the flowers grow, location is not important. Avoid soil robbed by tree-roots. Make the ground rich. A water-supply is important but not essential. Arrangements for height, season, and color-harmony can be carefully worked out beforehand, or the garden may be planted and rearranged later.

For one who feels that he knows nothing of flowers, or their requirements, we can select a list of plants which will require the minimum of care. If everyone who has a bare house and bare grass-plot could know the perennial joy there is in watching, year after year, the tender shoots push up through the bare earth in spring, watching the buds unfold until the tiny flower-bed or garden is a glow of color, there would be fewer uninteresting houses, and our suburban and country places might, in time, acquire the beauty of such districts in England, where it is the custom for everyone to have a garden-spot. The flower-garden is now considered an outdoor room, and furnished with simple or elaborate furniture; it repays the owner many times over for the care bestowed upon it.

Such gardens can be made at small initial cost and at practically no expense for maintenance. The care of a garden may be limited, if necessary, to keeping the weeds down and the paths in order, cutting the tops of those that have gone to seed, and replanting or dividing some varieties after a few years' growth, to extend the planting or give the surplus to a neighbor.

Another use for hardy flowers is to plant them among the trees and shrubbery, thus adding color and interest during the otherwise dull season of shrubs in summer and autumn. The tall and strong-growing sorts, like Aster, Helenium, Helianthus, Hibiscus, Hollyhock, Iris, Lily, Golden Glow and Yucca, may be planted safely in the shrubbery, while the lower-growing plants may be arranged irregularly at the front.

The list we offer is carefully selected. We aim to grow only the best of each species, and have eliminated, as far as possible, undesirable colors; for we wish our patrons to feel that they can be sure of obtaining the effects desired.

ACHILLEA Ptarmica flore pleno, "The Pearl." For masses of white in the garden this is excellent. It grows about 1½ feet high, and is covered with small, button-like flowers that are always ready to cut.

A. millefolium, "Cerise Queen." This rich amaranth-red Yarrow is most valuable for producing a good and continuous color-mass. 1½ ft.

ACONITUM autumnale. Monkshood. For the autumn the Monkshood gives the garden spires of blue or purple like Delphiniums. 4 feet. Valuable for shady places.

ADAM'S NEEDLE. See Yucca.

ALTHÆA rosea. Hollyhock. For formal or informal planting nothing surpasses the old-fashioned single Hollyhock. For accenting points, for backgrounds, or planted against buildings, it is equally at home by the New England doorstep or in the most elaborate garden. Its stately spires, 6 feet high, range through beautifully brilliant or soft pastel shades. Pure white, clear pink, salmon, primrose, scarlet to black-maroon.

Double. Pink, white, yellow, red and maroon.



TREES FOR LONG ISLAND



HARDY GARDEN FLOWERS

ALYSSUM saxatile compactum. Golden Tuft. This bright little plant grows less than a foot high, and is covered with a fluffy mass of golden blossoms in early spring. It thrives in dry situations, and is a suitable companion for the Moss Pink, the white or Lilacina varieties harmonizing, as well as the *Iris pumila* hybrids; all bloom together.

AMSONIA Tabernæmontana. A vigorous, shrub-like plant bearing light blue flowers in June. It may be appropriately placed in the shrubbery. Suitable for dry ground. 2 feet.

ANCHUSA Italica, Dropmore variety. The beautiful Gentian-blue so much desired. A much-branching plant growing 4 or 5 feet high and blooming all summer.

ANEMONE Japonica alba. Japanese Windflower. It is hard to adequately describe this most beautiful of all the fall flowers. It ranks with the Madonna Lily of June for purity. The pure white flowers, about 3 inches across, with their golden stamens, are borne on graceful stems, rising about 2 feet high. An exquisite cut-flower from August to hard frost.

A. Japonica, var. "Queen Charlotte." The silvery pink shade of the La France Rose.

ANTHEMIS tinctoria. Marguerite. A compact, bushy plant covered with golden yellow flowers throughout the summer. It will do well on poor soil. 15 inches.

AQUILEGIA. Columbine. The airy grace of the Columbine makes it a fitting ornament to any part of the garden. It is particularly attractive planted among the German Irises, each augmenting the beauty of the other.

A. Canadensis. Common American Columbine. The variety which is native on our northern rocky ledges, and which was called Wild Honeysuckle by our grandmothers. The flowers are red and yellow.

A. chrysantha. Golden Columbine. A yellow variety with long spurs. Graceful and delicate in appearance.

A. cœrulea. Rocky Mountain Columbine. A long-spurred variety of clear bright blue and white. Flower and foliage are very dainty, but with us are not vigorous. See *A. Helenæ* for the same color.

A. Helenæ. A new hybrid which, although not so long-spurred as the *Cœrulea*, is strong-growing and, as it bears large flowers of the same shade of blue and white, it should be used by those who wish this color.



Anemone Japonica the daintiest flower of autumn



Aquilegias are distinguished by having long, tubular petals with a drop of honey at the tip. They bloom in time to feed the hummingbirds on their return from the tropics in May.

Garden path bordered by Boxwood and arched by Rosa Wichuraiana and Privet.

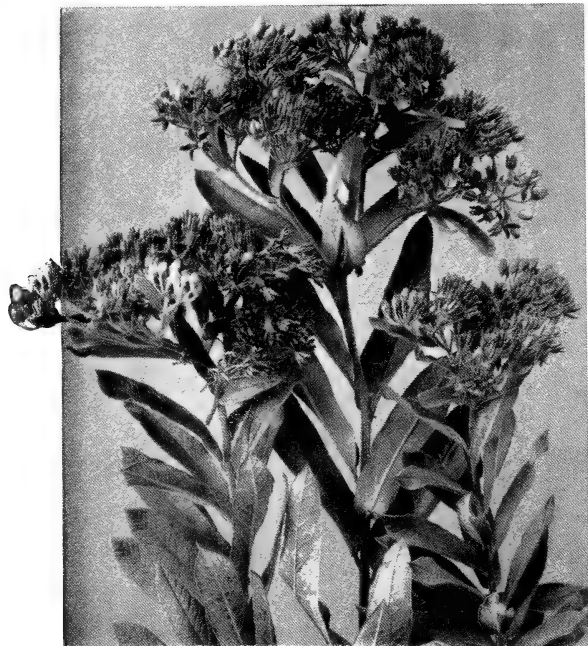
Aquilegia nivea grandiflora. A long-spurred white sort, borne on tall, stiff stems which do not arch as do the foregoing varieties. Fine for massing in the garden and for cut-flowers.

Mixed Varieties. In fine shades of blues, yellows, and reds.

ARABIS alpina. Alpine Rock Cress. One of the very early spring flowers; splendid for bordering or for carpeting; especially good in the bulb bed. Pure white.

ARMERIA plantaginea. Thrift; Sea Pink. This plant is used principally for its foliage, which forms little tufts like grass or moss, and is used for bordering flower-beds. It thrives near the sea. The blossoms are rosy pink. 6 inches.

ASCLEPIAS tuberosa. Butterfly Weed. Occasionally growing in sandy soil on Long Island is seen a mass of glowing orange flowers in the hottest period of midsummer. This pure and brilliant color and the drought-resisting qualities of the plant seem to us so valuable that we are growing it in quantity in order that brilliant effects may be created on sterile soils. We recommend the use of it in masses, to light up and contrast with the rich green of Cedar and Pine groves, where it will make a glorious show. 1½ ft.



Asclepias tuberosa. A dome of orange. Plant two hundred on a sunny bank, and start a new idea in utilizing the native flora.

ASTER. Michaelmas Daisy. The hardy Asters, native to our roadsides and abandoned fields, vie with the Goldenrods in illuminating the autumn landscape. They are also valuable border plants, as well as useful in shrubberies.

A. Novæ-Angliæ. New England Aster. Large flowers of bright violet-purple, with yellow centers. 4 ft.

A. Novæ-Angliæ, var. roseus. Large. Rose-purple flowers. 4 feet.

A. Novæ-Angliæ, Thomas S. Ware. A large-flowered, rosy lilac or pink. 3½ feet.

A. Novi-Belgii, Perry's Pink. A bushy, dwarf plant with extra-fine pink flowers.

A. Novi-Belgii, Gloire de Nancy. Large; white. One of the best.

A. Novi-Belgii, Topsawyer. Parma violet color. 4 feet.

A. Tataricus. A very tall, erect plant 6 feet high, bearing clear azure-blue flowers in October after the frost has killed most other flowers.

A. sub-cæruleus. This varies from most of the Asters in that it has a dense tuft of leaves from which flower-stems are thrown up about a foot high in midsummer, bearing violet-blue flowers 3 inches across.

BABY'S BREATH. See *Gypsophila*.

ASTILBE Japonica. See *Spiraea Japonica*.

BEE BALM. See *Monarda*.

BELLIS perennis. English Daisy. This is as much the children's favorite as the first Violets and Forget-me-nots. It is much used for edging and for bedding in formal gardens, blooming in the spring and through the season scatteringly, and again in the cool autumn. Excellent for carpeting among bulbs, such as Poet's Narcissus.

BLANKET FLOWER. See *Gaillardia*.

BLEEDING HEART. See *Dicentra*.

CERASTIUM tomentosum. Snow-in-Summer. The silvery gray foliage and snow-white blossoms make this good for carpeting or bordering, especially near the blues or purples. 6 inches.

CACTUS, *Opuntia vulgaris*. The Prickly Pear grows in the bottom of the driest valleys at Meadow Brook on the Hempstead Plains, where the soil is a coarse gravel. It also grows on the beach at Eaton's Neck. A novel use has been made of it on a nearly vertical bank held by wire netting. The large yellow Cactus blossoms, about 3 inches across, nearly cover it and are followed by the red, pear-like, edible fruits.

CAMPANULA. Bellflower. Stately garden plants with blue or white bells. If the flowers are cut immediately after fading, the blooming season may be prolonged.

C. persicifolia grandiflora. Peach Bells. This is one of the best of the Bellflowers. It grows 2 or 3 feet high, with large blue bells, 2 inches across, in spikes, during June and July. See picture of our stock on next page.

C. persicifolia, var. alba. A white form of the above.

C. persicifolia gigantea Moerheimi. Spikes of pure white, camellia-like, double flowers from May to July.

C. pyramidalis. Chimney Bellflower. This is the showiest and tallest of the Campanulas, growing 4 to 6 feet high. It is not reliably hardy here. It is much used for pot-culture, and for porch or terrace decoration.

C. Medium. Canterbury Bells. The best known of all the Campanulas and its magnificent spikes of blue, pink and white flowers produce an effect in the garden not equaled with any other plant. Requires extra winter protection.

C. Carpatica. Carpathian Harebell. Dense tufts of leaves from which numerous broad, salver-shaped flowers are thrown up singly on wiry stems, about 8 inches high. A splendid plant for bordering beds. Blue.

C. Carpatica, var. alba. A white form of the above. We grow both colors in quantity.

C. rapunculoides. An attractive plant, with graceful spires of blue bells, 2 to 3 feet high. An excellent plant for naturalizing in the wild garden.

CANDYTUFT. See *Iberis*.



Bellis perennis (English Daisy). At the cool ends of the season, April and May, and in September and October, these cheerful pink-and-white flowers are produced in profusion.



TREES FOR LONG ISLAND



HARDY GARDEN FLOWERS

CHRYSANTHEMUM. The old-fashioned Chrysanthemum is one of the standbys for a fine show of flowers from early October to Thanksgiving, if the season is late. The hardy varieties belong to the Pompon class, the flowers varying from 1 to 3 inches, but are not so large as the greenhouse varieties. To get the best results, they should be set in a sheltered position along the south side of the garden wall or the house where the early frosts will not reach them.

Prince of Wales. The best pure white.

Myers' Perfection. Tall, white, anemone-flowered.

Anna Mary. Cream-white, shaded pink; button.

St. Illoria. Silvery rose; quilled petals.

Rhoda. Pink, shaded white; button.

Julia Lagravere. Crimson-maroon.

Ermine. Bright orange-scarlet; button.

Eagle d'Or. Golden yellow.

Alice Cary. Pure yellow; button.

Urith. Large-flowered; bronze, tipped yellow.

Brown Bessie. Dark bronze; button.

Small Golden Button. This is distinct from the others in that it is the latest and hardiest, retaining its bright solid foliage and brilliant, small and most charming flowers well into December.

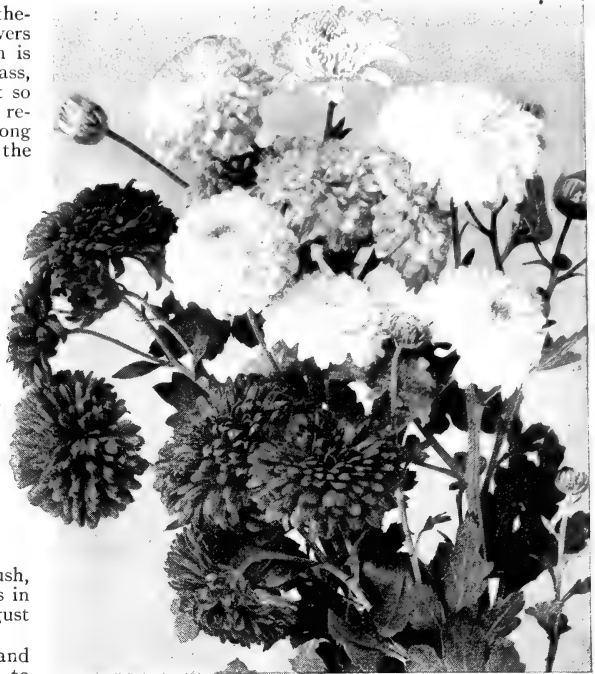
C. maximum, "Triumph." Where this is grown to perfection, as in England, it is one of the showiest garden plants. Growing about 2 feet high, it is covered with large, white "Daisies" from June to October.

CLEMATIS tubulosa, var. **Davidiana.** An erect bush, 2 to 3 feet high, with blue, hyacinth-shaped flowers in clusters, having an orange-blossom fragrance. August and September.

C. integrifolia. This grows about 2 feet high, and bears solitary, drooping blue flowers from June to August.

C. recta. Another shrubby plant, 2 to 3 feet high, which should be extensively used in shrubberies. It bears in profusion, from June to August, broad terminal clusters of white flowers similar to *Clematis paniculata*, the vine. One of the best.

COLUMBINE. See *Aquilegia*.

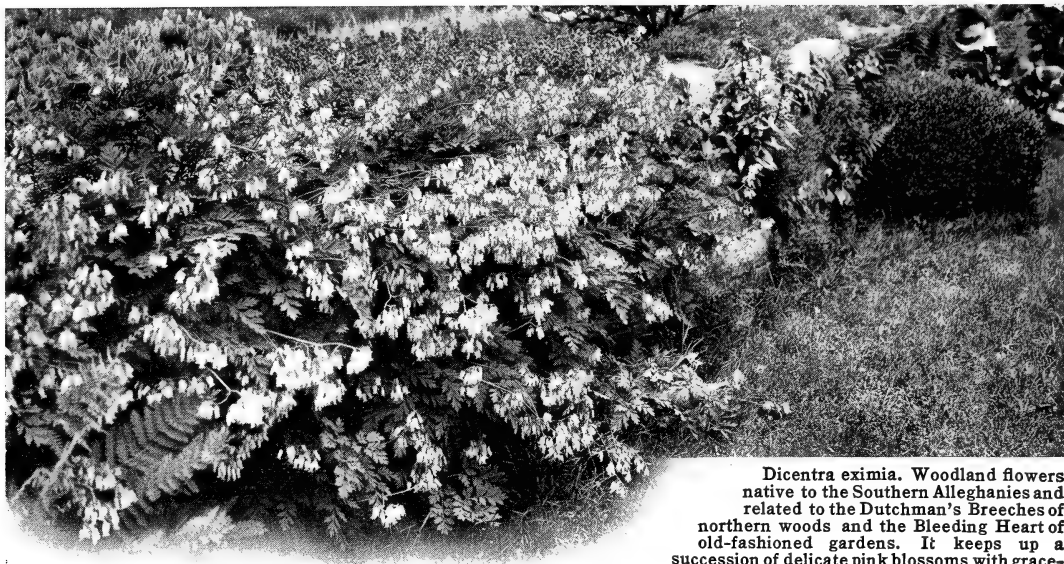


Chrysanthemums. Long Island is especially favorable for these, because the ocean keeps away the early frosts

CONVALLARIA majalis. Lily-of-the-Valley. Every garden should have a space devoted to the Lily-of-the-Valley, which will thrive in sunshine or shady corners. Large clumps will cover a large area, and may be used to cover bare earth under certain kinds of trees.



Bed of *Campanula persicifolia* in our nurseries, showing the large, vigorous plants you will get. They are as showy as Phlox, but earlier. One customer says that everything she takes home in the auto thrives. It is a pleasure to take home a box of such plants, with a spadeful of earth on the roots, plant and water them, and see them decorate your grounds next day.



Dicentra eximia. Woodland flowers native to the Southern Alleghenies and related to the Dutchman's Breeches of northern woods and the Bleeding Heart of old-fashioned gardens. It keeps up a succession of delicate pink blossoms with graceful fern-like foliage. In this picture it is growing in the chinks of a wall laid without mortar.

COREOPSIS lanceolata grandiflora. Brilliant yellow flowers on slender stems about 2 feet high. It blooms all summer, and is superior in delicacy and grace to many of the yellow flowers.

COWSLIP. See *Primula*.

DAFFODILS. See *Narcissus*.

DAISY. See *Bellis* and *Rudbeckia*.

DAY LILY. See *Funkia* and *Hemerocallis*.

DELPHINIUM. Larkspur. The stately Delphiniums, when well grown, are unsurpassed. An ideal combination can be made with the pure white Madonna Lily. Three crops of flowers may be had by cutting all flower-stalks immediately after fading.

D. formosum. The old-fashioned dark blue. 4 feet.

D. formosum, var. caelestinum. The light blue shades. 4ft.

Delphinium grandiflorum, var. Chinense. A low-growing variety with feathery foliage and deep Gentian-blue flowers in open panicles blooming all summer.

Belladonna. Of dwarf habit, much branched, bearing azure-blue flowers from June until cut down by frost.

Gold Medal Hybrids. This is a superior strain, raised from seed from the best named varieties grown by a Delphinium specialist in England, and the colors are varied—mostly of the lighter shades.

DESMODIUM. See *Lespedeza*.

DIANTHUS. Hardy Pinks. Nothing can take the place of the hardy garden Pinks. Their spicy fragrance fills the air in May and June. They should be used liberally in the front of the border. A dry, sunny position is preferable. 1 foot.

June Pink. The old-fashioned, double, pure white, clove-scented Pink which we have grown for fifty years. It makes great mats of white.

Mrs. Sinkins. Similar in growth to the above, but has larger flowers of clove fragrance.

Her Majesty. Very large, pure white, but not so free blooming as the others.

White Reserve. A very free-blooming, white Pink which bears blossoms frequently during the summer.

Lord Lyon. A good, double, pink flower.

D. plumarius. Double and single, sweet-scented, hardy Pinks in various shades of white to red, and prettily marked.

D. Chinensis. China Pinks. These beautiful Japanese Pinks are indispensable for making great sheets of brilliant colors, lasting several months in the garden. Although classed as annuals they are biennial and, with a slight protection of leaves, winter successfully. Splendid for cutting.

D. Chinensis, Double. The double varieties we grow and can usually furnish in color are Salmon King and Fireball. The mixed varieties are the Heddewigi, Imperial, Laciniatus and Nobilis Pinks, which are all beautiful shades ranging from white, through pink, salmon and crimson, beautifully striped, mottled and fringed.

D. Chinensis, Single. The single sorts we can usually furnish in color for bedding, are Salmon Queen, Crimson Belle and Vesuvius, while the mixture is the same as in the doubles. We consider the single the more pleasing of the two.



Dianthus, June Pink



Dianthus barbatus. Sweet William. One of the oldest of flowers. The new shades afford unsurpassed material for brilliant mass-planting for color.

Newport Pink. A new variety of watermelon- or salmon-pink.

White. Pure white.

Holborn Glory. This mixture has large, individual flowers and trusses, each flower showing a large, white eye. A wide range of color.

DICENTRA spectabilis. Bleeding Heart. This always had a prominent place in our grandmothers' gardens. The graceful red stems of the young growth push up rapidly while early spring work is in progress. The plant dies down in June, and its place may be filled by annuals, like the Verbena or more permanently carpeted with Moss Pink. The pink, heart-shaped flowers are the delight of children for making "bunny rabbits" and "slippers." Good for shady situations.

D. eximia. This is a valuable plant both for foliage and flower. The pink flowers continue to bloom all summer and the finely cut foliage is good for bouquets. It makes an excellent plant for shady places and a dainty edging.

DICTAMNUS fraxinella. Gas Plant. One of the longest-lived perennials. The spikes of curious pink flowers, borne in June and July, give off a pungent, volatile oil which will burn. An upright, sturdy plant that keeps in good order all the season, as do the Peony and Funkia.



Digitalis or Foxglove. Stately spikes of white or rose flowers. It is very attractive in the garden or woodland borders or shrubbery the latter part of June.

Dictamnus fraxinella alba. A white form of the preceding; showy. 2½ feet.

DIGITALIS. Foxglove. The dignified and stately Foxgloves are indispensable in the garden and shrubbery, or for naturalizing along woodland borders. 4 to 6 feet. June.

D. gloxiniaeflora. Rose-colored. A splendid strain with heavily spotted throats. Stronger and more vigorous, as well as of better color, than the ordinary sort.

Pure White.

The tall spires of the pure white Foxgloves are so beautiful, and lend the right touch in so many situations, that we grow this variety in quantity for extensive planting.



Gaillardia grandiflora

DORONICUM plantagineum excelsum. Few know the attractions of this yellow daisy-like flower, 3 inches across; blooms in April and May. 2 feet.

ECHINOPS. Globe Thistle. Deep metallic blue, globular heads of flowers make this a showy and interesting plant. They should be massed against the coarser-growing plants like Helianthus, or are suitable to plant with Eryngiums.

ERYNGIUM amethystinum. Sea Holly. Blooms from July to September. This ornamental plant has glistening steel-blue stems, foliage and flowers. The flower-heads may be used for dried winter bouquets. 2 to 3 ft.

EVENING PRIMROSE. See Enothera.

EUPATORIUM celestinum. Hardy Ageratum. Makes a sheet of pretty bright blue from August to frost.

FORGET-ME-NOT. See Myosotis.

FOXGLOVE. See Digitalis.

FUNKIA. Plantain Lily; Day Lily. The Day Lily is of neat habit, making a crown of foliage that is so uniform in shape as to be of value in formal gardening. Valuable for shady situations, also.

F. lancifolia. Narrow, lance-like leaves and spikes of lavender flowers. September and October.

F. lancifolia, var. variegata. Variegated foliage and lavender flowers. A good edging plant.

F. ovata. Splendid, broad-leaved foliage, forming a fine dome all the season; bears blue bell-like flowers in long spikes. 2 feet.

F. subcordata grandiflora. No flower gives the impression of greater purity. The delicate orange perfume of these long, waxy white Lilies pervades the garden in August.

GAILLARDIA grandiflora. Blanket Flower. One of the best all-round garden flowers, blooming continuously from June to late autumn; valuable for its floriferousness, as well as for its cutting qualities. It is loaded with large, daisy-shaped flowers having a dark red-brown center and rings of crimson, vermilion and yellow in a great variety of combinations. 2 feet.

GENTIANA Andrewsii. Closed Gentian. Celestial-blue flowers. Native along brooks on Long Island. September. 1 foot.

GEUM atrosanguineum. Bright red flowers in loose sprays about 18 inches high. Summer and fall.



HARDY GARDEN FLOWERS

GYPSOPHYLA paniculata.

Baby's Breath. A fine, gauzy white spray to give a halo of white around a bouquet of bright-colored flowers. It grows about 2 feet high, and blooms in July, August and September.

HELENIUM autumnale superbum.

Broad-spreading plants with deep golden yellow flowers, with yellow centers. Summer and fall. 5 to 6 feet.

H. pumilum. A dwarf plant about 15 inches high, covered all the season with bright yellow flowers.

HELIANTHUS Maximiliana.

After the hard frosts, when nearly all the flowers are gone, this tall plant is still holding aloft its great golden masses of flowers, 4 inches across. Fine for cutting at this season. 5 to 6 feet.

H. mollis.

Hoary Sunflower. This is a lower-growing plant, with downy white foliage and lemon-yellow flowers, 3 inches across. August and September. 4 feet.

H. rigidus, var. Miss Mellich.

A very valuable variety with most attractive, large, single flowers borne on graceful stems. One of the best for cutting. There is nothing weedy about it. September and October. 5 to 6 feet.

H. orgyalis.

Unbranched stems, 8 to 10 feet high, densely encircled with drooping, grass-like foliage, and bearing at the top graceful spires of small yellow flowers. Ornamental for use in the background or among shrubs.

HELIOPSIS laevis, var. Pitcheriana.

A bushy plant, 2 to 3 feet high, covered with loose panicles of yellow flowers from July to October. Good for dry situations.

HEMEROCALLIS.

Yellow Day Lily.

H. Dumortierii.

The earliest yellow Day Lily to bloom. A neat, low-growing plant, 18 to 24 inches high, bearing rich, orange Lilies, bronzed outside. Good for the front of the border. June and July.

H. flava.

Lemon Lily. The vigorous, old-fashioned Lily. It should be used in masses in the border and along the banks of streams, or in shady places. June and July. 3 feet.

Florham.

A comparatively new variety, 3 to 3½ feet high; a vigorous grower with large golden flowers with edges slightly frilled. June and July.

Gold Dust.

Bright Indian-yellow, with buds and reverse of petals bronzed. May and June.



Hemerocallis flava at the edge of a pond. It is just as contented in the drier soil of an average garden.

Hemerocallis fulva.

Tawny Day Lily. About abandoned houses and along roadsides where garden rubbish has been dumped in years gone by, this Lily is found persistent. This vigor shows a commendable quality, and we have seen it used successfully to hold steep banks. July and August.

H. fulva, var. Kwanso.

Double Orange Lily. A double form of the former, the margins of the flower being waved. Both should be used in wild planting and shrubberies.

H. Thunbergi.

Thunberg's Day Lily. This closely resembles *Hemerocallis flava*, but prolongs and ends the Yellow Day Lily season by blooming a month later.

HEUCHERA sanguinea.

Coral Bells. A dainty plant with loose sprays of little coral bells. One of the few really good plants bearing small red flowers. July and August. 1½ feet.

HIBISCUS Moscheutos.

Marsh Mallow; Rose Mallow. Along the edges of the salt marshes this is the largest wild flower of this region—great Hollyhock-like blossoms, 6 inches across, of cerise-pink. Although native of damp ground, it thrives in the garden or shrubbery. 4 feet.

H. Moscheutos, var. "Crimson Eye." A pure white, widely expanded flower, with a velvety crimson center. The leaves are tinted bronze.

HOLLYHOCK.

See *Althæa rosea*.

HYPERICUM Moserianum.

Gold Flower; St. John's-Wort. A mat of shining foliage about 8 inches high, spreading by underground stems. The flowers are of a beautiful golden yellow, shaped like the Japanese Anemone, and about 2 to 2½ inches across. The cup is almost filled by a ball of golden stamens. Very free flowering and blooms all the season.

IBERIS.

I. sempervirens.

Evergreen Candytuft. This is the hardiest and most permanent of the Candytufts. It forms low plants with evergreen foliage, covered with flat heads of white flowers in early spring. Fine for use as edging to the border.

I. Gibraltarica hybrida.

This variety has larger flowers and clusters, but is not so hardy as the above. The color varies from white to lavender. May and June.



German Iris, or Fleur de Lis. A hardy flower border of this type can be located in almost any position. You can arrange to have a show from early bulbs in March to the Hardy Chrysanthemums in December.



IRIS

The various Irises can be selected to cover a long period of bloom—over three months—and are among the most satisfactory, beautiful and easily cared for of the hardy plants. From the various groups we have selected two or three distinct varieties, chosen either for richness of coloring or exquisite delicacy.

Tall Bearded Irises

I. Germanica. German Iris. *Fleur de Lis*. While it has been customary to place the following varieties indiscriminately under the head of *Iris Germanica*, because they were of the same general type, they really belong to various species. May and June.

Purple King. Very rich, deep, velvety purple. 2 feet.

Spectabilis. Light and deep violet-purple.

Walnerii. Standards light blue; falls light purple, veined.

I. Germanica, Pallida Section—

Pallida Dalmatica. The very tall, strong-growing sort, bearing high above the foliage large flowers of a uniform lavender-blue with an orange-blossom fragrance. Blooms several weeks later than the other Germanica varieties. 3½ feet.

Queen of May. An unusual shade in Iris; soft lilac, almost pink. 2½ feet.

Ciengialti. Probably a dwarf variety of the *Iris pallida*. A free bloomer of delicious fragrance. Standards lavender-blue; falls, soft violet-blue.

I. Germanica, Variegata Section—

Maori King. A brilliant variety, one of the richest colorings of this section. Standards rich golden yellow; falls, velvety crimson, edged with gold. 1½ feet.

Aurea. The finest pure yellow. Extra-large flowers and fine foliage. 2 feet.

Honorabilis. Standards golden; falls, rich mahogany-brown. One of the most effective in its contrasting colors.

I. Germanica, Squalens Section—

Dr. Bernice. A very large, beautiful flower, with coppery bronze standards and velvety crimson falls. 2 feet.

Jacquesiana. Handsome. Standards bright, coppery crimson; falls, rich maroon. 2½ feet.

I. Germanica, Plicata Section.—

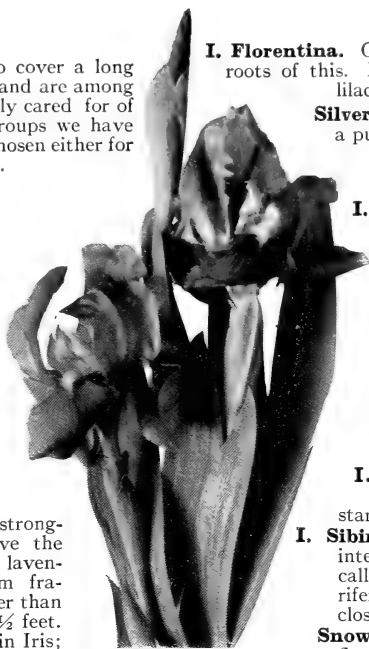
Bridesmaid. A handsome Iris. The standards are white, delicately shaded with lavender, while the falls are soft lavender, reticulated at the base and with slightly frilled edges.

Gazelle. White, heavily frilled with rich mauve. Very dainty in effect. 2½ feet.

Madam Chereau. One of the finest of this class, as well as one of the tallest and most desirable. It bears pure white flowers with a frilled edge of clear blue. 3½ feet.

I. Germanica, Neglecta Section—

Othello. A tall Iris with rich blue standards and dark, velvety purple-blue falls. 2½ feet.



Iris pumila cyanea, one of the earliest flowers

Various Irises

I. Florentina. Orris-root is made from the powdered roots of this. Large, white flowers slightly suffused lilac. Early. 2 feet.

Silver King. The flowers are larger and of a purer white than the former.

Dwarf Bearded Irises

I. pumila hybrida cyanea. A very large flower of rich, satiny blue-purple. Growing less than 8 inches high, it makes a fine edging, harmonizing well with the white and Lilacena varieties of *Phlox subulata*, *Alyssum saxatile*, or *Arabis alpina*. April and early May.

Eburna. Creamy white. May be used as edging to contrast with pink Moss Pink. April and May.

Florida. Sulphur-yellow, veined greenish brown. April and May.

I. cristata. A low, creeping variety but 3 inches high, with exquisite, starry sky-blue flowers in May.

I. Sibirica orientalis. Siberian Iris. An intense, brilliant blue, the shade, it is said, called "Yale Blue." A remarkably floriferous, vigorous plant. The buds are enclosed in a bright red spathe.

Snow Queen. Very large, ivory-white flowers. Wonderfully profuse in bloom. A beautiful new variety found in Japan by Mr. Peter Barr.

IRIS Kämpferi. Japanese Iris. Rounding out the Iris season in early July, the Japanese Irises are the most magnificent. The enormous, broad blossoms of richest color or exquisitely delicate shades, are borne on stems 3 to 4 feet high, making a grand display in the garden, and are splendid for cut-flowers. The following are a distinct set chosen from a large collection, each being, in our estimation, the best of its color we have seen.

J. C. Vaughan. A large, six-petaled, pure white flower. One of the most effective of its color.

Eclair. The largest white; six-petaled; an improved Gold Bound.

Anna Christ. A dainty, three-petaled flower of pale lavender, slightly veined. Most beautiful single flower.

Victor. White, veined violet-purple, with a tufted center of violet-purple; handsome; six-petaled.

Blue Jay. Sky-blue, with distinct white lines on each petal. Six-petaled; one of the handsomest blue Irises grown.

Blue Danube. Deep indigo-blue, with large yellow blotch at the center. Six-petaled. Very brilliant in its color combination.

Helene Von Siebold. Reddish, veined white, with yellow at the base of each petal; three-petaled. A single flower of handsome form.

Paragon. A very rich, velvety royal purple, marked orange in the center; six-petaled. A magnificent double flower.



Lilium auratum amongst the Rhododendrons on the north side of our office.



KNIPHOFIA. *Tritoma*.

Flame Flower; Red-hot-Poker Plant. A spike of orange-scarlet and yellow rising on a bare stem 3 to 5 feet, from August to November. A native of South Africa, it should be mulched in winter.

LARKSPUR. See Delphinium.

LATHYRUS latifolia. Hardy

Sweet Pea. A vigorous, healthy vine, about 5 feet high, useful for clambering over shrubs. It bears clusters of rosy pink or white flowers. It will grow on very sterile soil.

***L. latifolia* alba, var. "The Pearl."** A pure white.

LAVANDULA vera. Laven-

der. The fragrance of the gray lavender foliage and flowers brings pleasant memories to mind. It will thrive with some winter protection. 1½ feet.

LESPEDEZA Sieboldi; syn., *Desmodium penduliflorum*.

A shrub-like plant about 3 feet high, densely covered with graceful sprays of magenta-pink, pea-shaped flowers in early September.

***L. Sieboldi* alba.** A pure white and very beautiful form of the above.

LIATRIS pycnostachya. Kansas Gay Feather. A showy plant with spikes, 5 to 7 feet high, of light rosy purple flowers. August and September.

***L. spicata*.** Devil's Bit. A fine, clear color with no magenta. These tall spikes of purple are splendid against a good background, and contrast with pink or white Phlox or Asters. July to September.

LILIUM auratum. Japanese Golden Banded Lily. Great white Lilies, each petal being thickly spotted with chocolate-crimson and having a wide golden band in the center. Very fragrant. Besides being in the garden border, these and the other Lilies we offer should be planted among Rhododendrons, where they bloom after the Rhododendrons and have the rich evergreen foliage as a background.

***L. candidum*.** Madonna Lily; Annunciation Lily. In June these pure white Lilies, which closely resemble the Easter Lily, make exquisite pictures planted with Delphiniums. 3 feet.

***L. elegans*, var. *Wallacei*.** Light apricot-yellow flowers spotted with black. This blooms in July with usually two blossoms on a stalk. Suitable for the front of the border or shrubbery. 1 to 2½ feet.

***L. speciosum album*.** A brilliantly handsome Lily with recurved petals of pure white, each having a greenish band through the center. Midsummer. 3 ft.



Kniphofia. One of the showiest flowers of late summer. The foliage is a tuft of slender leaves 2 ft. high

Lupine. Blue, pea-shaped flowers in tall spikes rise above the satiny, many-fingered foliage. A native of sandy dry places among the Pitch Pines of Long Island, it is one of the drought-resisters. June and July. 2 to 5 feet.

***L. polyphyllus*, var. *albus*.** A pure white; very effective.

***L. polyphyllus*, var. *Moerheimii*.** New. A beautiful Lupine in lovely shades of light and dark pink without a trace of magenta. A great acquisition.

LYCHNIS Chalcedonica. Lamp Flower; London Pride. Heads of bright orange-scarlet, 2 to 3 feet high; blooms all summer.

***L. Haageana*.** Large flowers of pink, scarlet or crimson. May and June. 1 foot.

***L. Flos-cuculi*, var. *plenissima semperflorens*.** Double Cuckoo flowers, or Ragged Robin. Graceful sprays of a lovely pure pink, much grown in old-fashioned gardens. May and June. 1 to 2 feet.

***L. viscaria* fl. pl.** German Catch-fly. From a dense cushion of evergreen foliage this sends up spikes of deep, rosy red, double flowers in June. It makes a showy bed.

MONARDA didyma, var. *Cambridge Scarlet*. Bee Balm; Oswego Tea. A spreading aromatic herb of unusually brilliant coloring, this variety being a fine crimson scarlet. It will stand sun or shade. June to September. 1½ to 2 feet.

MONTBRETIA crocosmæiflora. A bulbous plant, with graceful sprays of orange or vermillion flowers 2 inches across. July to October. 3 to 4 feet. Mulch protection is necessary.

MOSS PINK. See *Phlox subulata*.



Monarda. The Bee Balm, or Monarda didyma, excites the hummingbirds. They dart back and forth over it and occasionally stop to take a sip. A hardy perennial as showy as Salvia, with brilliant scarlet blooms.



MYOSOTIS. Forget-me-not. Blooms freely in early spring, and continues half the summer; small sprays of bright blue flowers. 6 to 12 inches.

NARCISSUS incomparabilis. Star Daffodil. This single yellow Narcissus, which is very vigorous and increases rapidly, should be extensively used for naturalizing. We offer this variety in quantity at low rates for this purpose. Small quantities can be planted in the spring, but large quantities should be planted any time from August to midwinter. They are not harmed by mowing off the tops in May, after the foliage turns. April.

N. poeticus. Poet's Narcissus. Very fragrant, single, pure white flowers with a short cup having red edges. Very beautiful naturalized in the grass. Increases rapidly. In the garden this variety is charming carpeted with pink English Daisy.

N. pseudo Narcissus, Von Sion. Old yellow double Daffodil with which we are all familiar in old-fashioned gardens and in clumps under the old Locust trees in farm-yards.

CENOTHERA fruticosa, var. Youngii. This is a shrubby plant growing 2 to 3 feet high, with red stems and clusters of large, showy, lemon-yellow flowers which continuously cover the plant during June and July.

PÆONIA Sinensis. Peony. Within the last half century wonderful improvements have been made in the Peony, and today for size, beautiful coloring and fragrance no hardy garden plant surpasses it. The roots may be planted any time from the middle of August until the ground freezes, and very early in the spring before growth has advanced too far. Spring-planted Peonies will not bloom the first summer and typically perfect blossoms are not produced till the second or third year. June.

Madam Crousse. White; midseason. One of the finest pure whites, the center petals edged with bright carmine. Large flowers and fine bud.

Pæonia, Festiva maxima. White; early. While an old variety, Peony specialists unite in saying that it has never been surpassed. An enormous snow-white, double, fragrant blossom, frequently measuring 7 to 8 inches across, with an occasional purple spot on the edges of the center petals. 3½ feet.

Couronne d'Or. Crown of Gold. White; very late; large, imbricated petals of white, reflexed yellow, a few of the center petals being touched with carmine, and interspersed with golden stamens; very beautiful.

Queen Victoria; syn., Whitleyi. White; early mid-season. Opens flesh-white, changing to pure white with red blotches tipping some center petals. A standard cut-flower variety.

Delicatissima. Pink; large, full flower of very clear, delicate pink, shading lighter toward the center. A vigorous grower and free bloomer; very fragrant.

Triomphe de l'Exposition de Lille. Pink; late; imbricated petals of soft flesh-pink with white reflex; a very fresh coloring. A good, compact grower.

Humei carnea. Pink. A large, cinnamon-scented flower of clear cherry-pink. Largely grown for cut-flowers.

Felix Crousse. Red; late midseason; one of the finest, brilliant reds. Large, anemone ball-shaped bloom, glowing with ruby-flame-colored center.

Rubra superba, Richardson's. Crimson; late; brilliant, velvety, deep crimson. The latest of all Peonies to bloom; very fragrant.

Delachei. Crimson-purple; late midseason; a free bloomer of a velvety amaranth shade, showing golden stamens through the full-double center.

P. officinalis rubra fl. pl. The true old-fashioned Peony which decorated our grandmothers' gardens. It blooms about two weeks before other Peonies, and differs in that the foliage dies down in midsummer and should, therefore, be so planted that other flowers will cover the same space later. Deep crimson.

Japanese Single Peonies. Pure white; yellow stamens.



Flower-garden showing German Iris in the foreground. On the boundaries are tall, slender Red Cedars



HARDY GARDEN FLOWERS

Pæonia Moutan. Tree Peony. A dwarf shrub, bearing immense flowers. It usually grows to be 3 or 4 feet high, and blooms about three weeks earlier than the Chinese Peony. While hardy, the buds are liable to be injured by late spring frosts, and the plant, therefore, requires protection.

PAPAYER orientale. Oriental Poppy. For gorgeous display of intense vermilion or scarlet nothing rivals the great Poppies, frequently 8 inches across and borne on stems 3 feet high.

P. nudicaule. Iceland Poppy. A dainty little plant with white, orange and orange-scarlet flowers in early spring and continuously through the summer.

PENTSTEMON barbatus, var. Torreyi. Rising from a tuft of almost evergreen foliage the slender, nodding stems, 4 feet high, bear many small, bright scarlet trumpets. A showy plant from June to August.

PHLOX PANICULATA

The new Phloxes are so beautiful, and so varied in exquisitely delicate shadings, that there seems no excuse for the grower who continues to offer a long list plentifully sprinkled with rose-magenta, rose-mauve, rosy lilac, and many less explicit descriptions, much to the mystification of the amateur who is trying to select a few harmonious colors. There are many violent, freaky, or washy shades, even in the best lists we have studied, which should not be offered. The varieties offered below are distinct and each the best of its color we have seen.

White

Independence. Tall. This is one of the best large-flowering, early whites. A strong grower with excellent foliage.

Queen. Tall. White; large clusters. Fine for planting in the back row of the border.

WHITE PHLOX, continued

Von Lassburg. Medium. Purest white; the individual flowers are very large.

Hermione. Dwarf. A very floriferous variety growing only 10 inches high; excellent for bordering beds or carpeting under low-growing Lilies.

White with Red Eye

Bridesmaid. Tall. Pure white with large crimson-carmine eye.

Aglae Adanson. Medium. Immense pure white, satiny flowers with soft red eye.

Pink

Sonnenkind. Medium. A rose-pink, shading lighter toward the center.

Beranger. Dwarf. White ground suffused or overlaid with rose-pink, with amaranth-red eye.

Salmon-Pink

Lumineaux. Tall. A splendid, late-flowering, salmon-pink shading lighter toward the center, with darker eye. A charming color. The individual flowers are very large.

Elizabeth Campbell. New. This delicately beautiful flower is a soft salmon shading to white in the center with a touch of red at the eye. An unusual and much-desired shade.

Wolfgang von Goethe. Medium. Deep salmon-rose with large white center.

L'Evenement. Dwarf. An even, bright salmon of satiny texture, with a showy blue-purple eye.

The above four varieties are all distinctly different, and together are charming. They harmonize perfectly, and may be safely planted with the white, scarlet, orange and red varieties of our list.



Phlox subulata covering the terrace. The ground was poor and sandy and was not enriched as would be necessary to grow a good stand of grass. This Phlox was planted about a foot apart and covered the bank the first year. It grows so densely as to crowd out the weeds and is much cheaper to maintain than grass. In May it flowers so profusely that it can be seen for several miles.



Part of all the Phlox groups in your garden may have their blooming season prolonged by nipping back the flower buds of some of the plants in June and July, and the garden will be a glow of color in August and September. Cutting the faded flowers will also result in another crop.

Scarlet and Orange-Red Phlox

George A. Strohlein. Large truss and individual flowers of brilliant orange-scarlet with blood-red eye.

Matador. Medium. Large flowers of bright orange-red with cherry center; fine heads and good foliage.

Coquelicot. Dwarf. Orange-scarlet with crimson eye. Once the finest of its color, it is well known and much called for, but it is a weak grower. The newer varieties now give the color-effect and stand up better.

Aurora Boreale. Dwarf. A vigorous grower with nice round heads of large orange flowers with purple centers.

General Van Heutsz. New. Very large flowers of brilliant salmon-red with white centers.

Red to Bronze-Red

R. P. Struthers. Tall. This is an excellent bright red, the flowers borne in open panicles much branched. A very vigorous, long-flowering variety.

Madame P. Langier. Tall. Brilliant geranium-red with vermilion center.

Fernand Cortez. Tall. Very large flowers of deep crimson, overlaid with coppery bronze; a fine, strong grower.

Crimson-Purple

Von Hochberg. Tall. Large-flowered; rich, satiny crimson purple. The finest of its color and a very handsome Phlox.

Lavender-Pink and Rose-Violet with White Center

L'Esperance. Dwarf. Light lavender-pink, with large white eye. A dainty flower and a suitable companion for Aglae Adanson.

Edmond Rostand. Large trusses of reddish violet flowers with a large, white, star-shaped center. Very distinct.

PHLOX suffruticosa. Early-flowering Phlox.

Miss Lingard. A distinct plant worthy a place in every garden. A cylindrical cluster of white flowers with lilac eye, blooming in June, five weeks earlier than others and continuing through the season. Its long, glossy, pointed leaves are always healthy.

P. subulata. Moss Pink. Economically, this is cheaper than grass on dry terrace-banks, road-banks, gravelly hillsides, tops of walls and ledges. We have sold many thousands for these purposes, and it has proved permanently satisfactory. Planted about a foot apart, it will spread and cover the ground completely, especially in dry situations. The first cost need not deter anyone

Phlox subulata, continued

from planting, because every little piece will grow and a small amount this year will supply many times the area next year. It makes a dense evergreen cushion of foliage which in May is completely covered with bright flowers. The variety *Atropurpurea* is an objectionable shade of purplish pink which we do not grow. We offer the following in large quantities:

Alba. Pure white. Useful for edging garden paths.

Lilacina. Light lilac. Excellent for carpeting under blue, purple, or white flowers.

Pink. An excellent pink; neat and compact in growth.

PHYSOSTEGIA Virginica. False Dragonhead. A beautiful flower in the garden or as a cut-flower. The color is a delicate shade of pink, and it blooms from July to September. 2½ feet.

P. Virginica, var. alba. Flowers pure white, of delicate beauty.

PINK. See Dianthus.

PLATYCODON grandiflorum. Chinese Bellflower. Bears large blue or white flowers, similar to the Campanulas, all summer.

POLYGONATUM giganteum. Solomon's Seal. Some call this a giant Lily-of-the-Valley. It has graceful, arching stems about 2½ feet high, bearing pairs of leaves with drooping cream-and-green bells at each axil. It makes graceful clumps in the garden, and is still more harmonious in a shady corner with ferns.

POPPY. See Papaver.

PRIMULA. Primrose. These are among the most attractive of the early spring flowers. They grow about 6 inches high; fine for borders. April and May.

P. Polyantha. Umbels of rich shades of yellow, bronze and reds.

P. veris. English Cowslip. Six to twelve small, cup-shaped flowers drooping in a one-sided cluster above the rosette of foliage. Various colors.

P. veris superba. A very floriferous sort bearing flowers over an inch across, in large umbels. Canary-yellow with golden center.

P. elatior. Oxlip. Similar to the English Cowslip, but bearing larger flowers.

P. vulgaris. English Primrose. Bright canary-yellow; fragrant. An old-time favorite.

PYRETHRUM. An early Spring flower like China Asters, but not quite so large. It has tall, slender stems useful for cutting. It blooms in May and June. The flowers are white, pink and crimson.



Pyrethrum hybridum fl. pl. Seedlings. These are raised from seed of a choice strain of double varieties, and while a good proportion will be double there are necessarily some singles. However, all are beautiful, and the colors range from white, through soft and deep pinks to red and crimson.

P. hybridum. Single. A fine range of color. Both are excellent for cut-flowers.

RUDBECKIA laciniata, "Golden Glow." Growing 5 to 6 feet high and bearing masses of golden, Dahlia-like flowers from July to September, this plant is valuable for making quick hedges or screens in temporary gardens, or for planting in the shrubbery.

R. submontosa. A common plant 2½ feet high, which is completely covered during the summer with lemon-colored Daisy flowers with dark purple centers.

R. purpurea. Giant Purple Coneflower. A sturdy plant suitable for the back of the border or shrubbery, bearing large, reddish purple Daisy flowers with a tall brown cone in the center. July to October. 3 feet.

SALVIA azurea, var. grandiflora. Meadow Sage. Large, open panicles of a lovely shade of blue, blooming in profusion from August to frost. Such blue is all too rare, and pains should be taken to insure a continuous succession of the beautiful shades of blue that are now obtainable from Anchusa, Aquilegia, Campanula, Delphinium, Iris, Stokesia and Veronica.

SEDUM acre. Stonecrop; Wall Pepper. Valuable because it will grow on any dry bank or rocky ledge, as well as in the garden. It will run through grass on a gravelly bank, and make a thicker base to prevent washing.

S. spectabile. Stonecrop; Japanese Live-Forever. A sturdy plant, 1½ feet high, with broad, fleshy, light green leaves and large flat heads of rosy red. August and September.

S. spectabile, "Brilliant." A bright amaranth-red form of the preceding.



Myrtle on the terrace bank creeping over the steps. In full sunshine, the Myrtle fails to reach its best development. In the shade it will make a solid green carpet crowding out the grass and weeds and maintaining itself at no expense. At the top of the steps is a Mugho Pine.

SILPHIUM perfoliatum. Cup Plant. Lemon-colored Sunflower-like blossoms. With its square stems and coarse foliage it is useful for wild planting or the shrubbery. August. 4 to 8 feet.

SPIRÆA Japonica; syn., *Astilbe Japonica*. Handsome, dark foliage about a foot high, from which rise effective, feathery panicles of white flowers in June. All the Spireas prefer half-shaded places, and may be planted by the waterside.

S. Kamtschatica, or gigantea. This differs from the others in growing to a height of 5 or 6 feet, and having large leaves and showy heads of cream-white flowers in July and August.

S. palmata, var. elegans. Free-flowering; silvery pink. June and July. 3 feet.

STATICE latifolia. Great Sea Lavender. Clouds of tiny blue-purple flowers rising 1 to 1½ feet from a tuft of luxuriant, large-leaved foliage in September. The dried flowers retain their color through the winter.

STOKESIA cyanea. Cornflower; Stokes' Aster. One of the newer plants which should be found in every garden because of its fine color and the length of its blooming period, from June to frost. It is of horizontal growth about a foot high, the flowers measuring 3 or 4 inches across, of a light porcelain-blue, resembling semi-double Asters or Cornflowers.

S. alba. A pure white form of the preceding.

SUNFLOWER. See Helianthus.

SWEET WILLIAM. See *Dianthus barbatus*.

SWEET MARY. Costmary. Large, aromatic leaves, having a fragrance associated with old-time gardens.

THERMOPSIS Caroliniana. A Lupine-like flower in upright, 3-foot spikes of yellow, pea-shaped blossoms. It will grow in dry, sterile soil and is, therefore, fitted for many places on Long Island. June and July.

THYMUS Serpyllum, var. citridorus. Lemon Thyme. A low mat of aromatic foliage.

T. Serpyllum, var. variegatus. Golden Thyme. Bright yellow, variegated foliage.

TRADESCANTIA Virginiana. Spiderwort. An old-fashioned plant, with bright blue flowers. May to August. 2 feet.

T. Virginiana, var. alba. A white form of the preceding.

TRITOMA. See Kniphofia.

TROLLIUS. Globe Flower. A beautiful, bright yellow flower resembling the Buttercup, but much larger and in various shades. May to August. 2 feet.

VALERIANA officinalis. Hardy Garden Heliotrope. This old favorite should be included in every garden because of the aromatic flowers and foliage. The dense clusters of small, rose-pink flowers are borne on stems 3 to 4 feet high in midsummer.

VERONICA longifolia subsessilis. Bluejay Flower. The best Veronica and one of the best of blue flowers. Long spikes of rich, deep blue borne in profusion in August and September. 3 feet.

VINCA minor. Trailing Blue Myrtle, or Periwinkle. See Broad-leaved Evergreens. The bright blue blossoms are seen on shady roadside banks in April at the same time the Golden Daffodils are in bloom. The chief value of Myrtle is in the rich, dark, evergreen foliage which completely carpets the ground in shady places.

V. minor, var. alba. A pure white form of the preceding.

V. minor plena. Double purple.

VIOLA. Violet. Hardy Double Russian Violet. Very fragrant and closely resembling the hothouse variety.

YUCCA filamentosa. Adam's Needle. See Broad-leaved Evergreens. Spikes of large creamy white flowers of wax-like texture, rise 5 feet above the dark evergreen foliage. It is appropriate in the formal garden or shrubbery, where it is most effective against a rich evergreen background. One of the drought-resisters. Blooms in midsummer.



Plants for Formal Gardens



Pyramidal Boxwood
in tub

UNDER this heading we list various trained plants which, however, can be used outside of a formal garden; that is, some of them may be used as single specimens or in groups arranged naturally or irregularly. If the trimming to precise lines is neglected, they will make broad and dense specimens. For instance, the Hornbeams that have been trained to sharp cones can be used for group planting, and in one season, if unpruned, will make beautiful specimens of irregular outline. The dome-shaped Privet will make big, broad bushes of better quality than usual in shrub plantings.

For formal planting, this material will save from five to ten or more years as compared with the ordinary stock or small plants which are trained by the gardener on the place. The latter is the European method, and the use of our stock may save a generation. One reason why plants trained in formal shapes are so beautiful in Europe is because they use what is native and therefore healthy. Many people make the colossal blunder of importing plants not adapted to this climate, which struggle along for several years before the owners realize the expensive mistake which makes their gardens unsatisfactory.

The form or the design is the important thing. The species is not important. Therefore, take what is native and train it. You can take Wild Cherry and make beautiful standards 6 feet wide in two years, and they will stand drought and salt spray. The fun of expressing your ideas with local material may be secured with Cedar, Bayberry, Dogwood, Beech, Oak, Pitch Pine, White Pine, Hemlock and many others. Do not wait for the nurserymen to train material, but start the fashion yourself.

STANDARDS

These are plants with a straight, bare stem and a globular head.

Catalpa Bungei. The *Catalpa* has leaves 4 to 8 inches wide. It grows rapidly and makes a wide head more quickly than any other plant. It is made by grafting the *Catalpa Bungei* on the stem of the *Catalpa* tree. It is best to keep them cut back both in winter and summer, to induce a dense, symmetrical growth which is less liable to split than where the head is left untrimmed. *Catalpa*



Catalpa Bungei has been popular because of its quick growth



View in our block of trained standard and pyramidal Privet. These have been in the process of manufacture six to twelve years.

Bungei usually comes with the stems 4, 5 or 6 feet high. When planted, the heads may be only a foot wide, but by August they will be 3 feet wide.

Ibota Privet. To make these closely match the Bay Tree, with a head flat at the bottom and hemispherical at the top, we bent the branches down to hoops. They then were repeatedly sheared to get a solid, dense foundation for the head. It is possible to get a plant with a V-shaped bottom to the head in one quarter of the time. This variety is perfectly hardy north to Canada. We have trained a large quantity of them exactly to uniform sizes, and therefore they are available for large gardens. It is best, in making any planting of this character, to buy a few extra plants and put in a reserve garden to replace any which may accidentally get broken.



STANDARDS, continued

California Privet. We have a few of these which have been trained for the past ten years, with very broad, mature heads and rugged old trunks.

Norway Maple, Globose. This is similar to the *Catalpa Bungei*, and is a dwarf variety of the Norway Maple, grafted on a straight stem. It grows about 4 inches per year.

Norway Maple. See also page 14. Our large Norway Maples, 20 to 30 feet high, with a spread of 10 to 20 feet and a trunk-diameter of 4 to 9 inches may be considered as Standards, for some of them have been repeatedly pruned to uniform, symmetrical shapes. We can select matched trees for pleached alleys, arching a path, avenue planting or planting about monuments.

Linden. See also page 10. Our Lindens are even more formal than the Norway Maples. They have an ovate shape in section like half an ellipse, while the Norway Maples are usually half a circle. We know of no stock in this country or Europe similar in age and quality to our Lindens and Maples.



Row of standard trained Cedars at Hicks Nurseries

Cedars. These are the wild Red Cedars trained for several years. They are green all winter, and give the same effect as the imported Bay Tree, which, however, has to be kept inside in winter.

We advise those having Cedars on their property, or in the vicinity, to train some of them for one or more years and then move them. We can send apparatus for doing this economically and safely. It will help to root-prune the trees by digging a trench around them 1½ feet deep and cutting the larger roots. A root-pruned tree, however, is apt to suffer for lack of water. If the weeds on top of the ball are starved or wilted, it shows that the tree is suffering. The best way is to dig down in the ball and see if the soil is dry. Cedars may be used in any shape desired. We have advised using them as a substitute for Dwarf Box edging 1 foot high. Thousands of little seedlings may be found in the grass. Transplant in the spring with or without a ball of earth. Keep the roots covered and moist.

PYRAMIDS

This term applies to plants trimmed more or less in the shape of the letter A. Any upright-growing tree, shrub or evergreen can be easily trained in this form. They are frequently used at regular intervals along the paths of a formal garden or at the edge of a terrace.

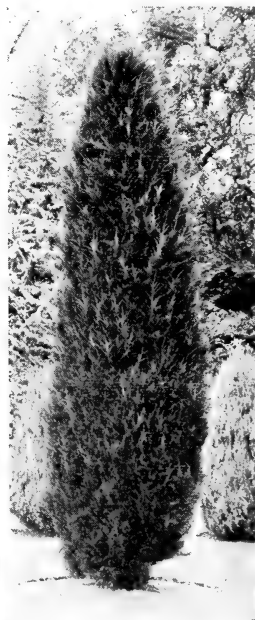
Hornbeam. See also page 8. We have an exceptional stock of European Hornbeams 10 to 14 feet high, and as many years old. They have a close-twiggged growth and dense foliage which remains a russet-brown color all winter. We recommend them highly, the Hornbeam being one of the few European trees with the European Beech, Larch, and Norway Maple which thrives here. These pyramids have a mature appearance, and look solid in winter. They are large enough to be in scale with large buildings

Hornbeam trained to a narrow pyramid. The picture was taken in winter and shows the russet leaves retained.

and gardens. We move them with a ball of earth in the same manner as the evergreens, and they are then certain to make a good growth the first year. This remarkable tree is not so well known in this country as it deserves to be, and we unhesitatingly recommend it to those who desire something different from the better known trees.



White Spruce. We have forty thousand little Spruces which you can train to uniform shape, resulting in the most economical evergreen for use as formal garden material.



Cedar Tree. We moved this tree from the wild growth. It was of the usual irregular, open type. A few years of careful pruning by the gardener resulted in rows of uniform specimens like this.



TREES FOR LONG ISLAND



PLANTS FOR FORMAL GARDENS



Hemlock hedge No. 3, five hundred feet long, about thirty-five years old. Can you imagine a better garden boundary than this? It was transplanted in August and September, 1910. It is ready for shipment by rail or delivery by tree-movers.

PYRAMIDS, continued

Ibota Privet. These have been accurately trained for the past five years, and will give a mature result at less expense than any other plant we offer. We recommend them highly for planting on either side of a walk on small cottage grounds, or for decorating large, formal gardens. The fact that the Ibota Privet never winter-kills makes this variety doubly valuable.

Boxwood. Boxwood will always be a favorite on account of its dense growth and dark green color, qualities in which it excels all other plants. If freshly imported Boxwoods are used, it is necessary to water them carefully the first summer. In Holland, the water is so near the surface that they do not make as deep roots as they need in this soil and climate. See also page 52.

White Spruce. See also page 33. We have thousands of these little plants, 2 feet high, that are the same size and shape. They are dense, dark green with a tinge of blue, perfectly hardy and certain to make satisfactory growth. They present an opportunity to secure formal plants at a minimum price. Such an opportunity is not likely to be repeated, because a stock like this is not generally grown.

Douglas Spruce. See also page 35. This is equally as valuable as the White Spruce. It grows a little more rapidly and not quite as dense; therefore, to get the same result, it is best to prune both in the summer and in the winter. This will result in keeping the trees in correct form and in fine condition.

Japanese Yew. See also page 36. We have a few of these 2 feet high, suitable for choice situations demanding a plant of high quality. They will grow in about the same shape as the Spruce trees and, with clipping, will become very dense and even.

Lombardy Poplar. See also page 20. Under favorable conditions this will undoubtedly make the quickest effect, but on Long Island it is very prone to get thin and raggy with a little-understood disease which kills the twigs and the bark of the main stem. To keep them in good condition, they should be cut back severely and given an abundance of food and water.

As substitutes we are propagating the **Pyramidal Tulip Tree** and **Pyramidal Locust**, both of which will make splendid pyramidal trees, as both bear distinctive and beautiful flowers which add to their effectiveness.

Cedar. See also page 24. The best large pyramid is, without question, the Red Cedar. This will closely reproduce the effect of the Cypress in Italian gardens. We have thousands of them in all sizes up to 30 feet. Some have been trained to exact lines and others have been clipped but allowed to preserve the slightly irregular form with the vertical lights and shadows seen in the best wild growth. They are superior in every way to the Lombardy Poplar, but cost more. We can ship car-loads of these at any time.

Our methods of moving these large trees is so perfect that there is absolutely no risk in transplanting them from our Nurseries to your grounds. We shall be glad to give suggestions as to how trained Cedars may be used to produce immediate effects.



Hornbeam hedge in winter. We have 1,000 feet of Hornbeam hedge that has been trimmed four feet high, suitable for garden, terrace or service court.



PLANTS FOR FORMAL GARDENS



Dome Privet at Town Hall, Manhasset, Long Island. These have much the same effect as Boxwood. Close and frequent pruning results in a dense growth of small leaves, compactly arranged.

DOMES

Under this term we list plants trained more or less in the shape of a hemisphere.

Boxwood, Bush Form. These naturally make a dome with little or no pruning. For description of Bush Form Boxwood see page 52.

Ibota Privet. This is the Privet that never winter-kills. It has dark green compact foliage and is very satisfactory for topiary work. It is hardy as far north as Canada. Our plants have been repeatedly cut back so that they are very broad and thick. Of course, they can be allowed to grow up without trimming and make natural-form bushes which will be very broad and handsome.

California Privet. Near the seashore, from Long Island southward, California Privet has been more satisfactorily planted than anything else. Its texture is so rich and glossy that other plants suffer in comparison. Only a few have become tired of the monotonous landscapes produced by its almost exclusive use. In irregular shrubberies it has been customary to trim it to a dome to prevent it from getting beyond bounds and to prevent its blooming and thus avoid the disagreeable odor of the flowers. For formal use the domes are appropriate. They quickly reach mature size and soon repair any defects in their outline.

Cedar. As a result of pruning, the foliage is dense and dark green. We advise those having fields of small Cedars to trim them to this form and move them into their gardens. The supply in nurseries is small.

Dwarf Arborvitæ. See also page 24. The Booth's, Globosa and other varieties make compact little domes, 1 to 3 feet high, suitable for planting as single specimens as well as in beds of evergreens. They will keep the best appearance if clipped annually and well fed.

Mugho Pine. See also page 31. This naturally makes a dome of from 4 to 8 feet high and 6 to 12 feet broad. It can be kept to an exact and dense outline by pruning in May; the new shoots then make numerous buds, resulting in a dense growth the next year. If cut back in the late summer, these new buds do not form and the growth is not as dense. The time of the year for clipping

Spruce, Arborvitæ and other evergreens is not as important as with the Pines, because they do not produce extra buds when cut.

Retinispora. See also page 32. The *Retinispora plumosa*, *R. plumosa aurea*, and *R. squarrosa* are usually trained to ovate outline about equal in height and spread. They can be used at intervals for formal planting, but they do not like to stand alone, unless in a sheltered place. There is a refinement about the Retinisporas not possessed by other evergreens of like nature, and the brilliancy of the foliage of the *Retinispora squarrosa* makes it particularly desirable for use in the adornment of the home grounds.

Dwarf Norway Spruce. See also page 34. The Maxwell's and Gregory's varieties make very dense, flattened domes about 1½ feet high and 4 feet wide in about ten years if planted when 10 inches high.

Other Spruces, such as the White Spruce, may be trained to a dome shape, as they successfully withstand any amount of pruning or shearing.

Dwarf Japanese Yew. See also page 36. The *Taxus cuspidata*, variety *brevifolia*, naturally makes an irregular, spreading plant about 1½ feet high and 4 feet wide. By repeated clipping, it can be kept to a dome shape. This species is very variable, and there will undoubtedly be varieties on the market later that will keep a symmetrical dome shape.

Spreading Yew. See also page 36. *Taxus repandens* naturally makes a dome about 1½ feet high and twice as broad. As it gets older, it spreads more widely and becomes a tumbling mass of foliage.

Golden English Yew. We have about twenty-five plants twenty years old, having much the form and texture of old Boxwood. In June the new foliage has a golden variegation. In winter the plants are dark green. These should decorate some old-fashioned garden or be used to mass against a wall. An offer of rare opportunity to get plants of mature appearance.



These arches are placed six feet apart, but they are trained so that they can cover a walk twelve feet wide

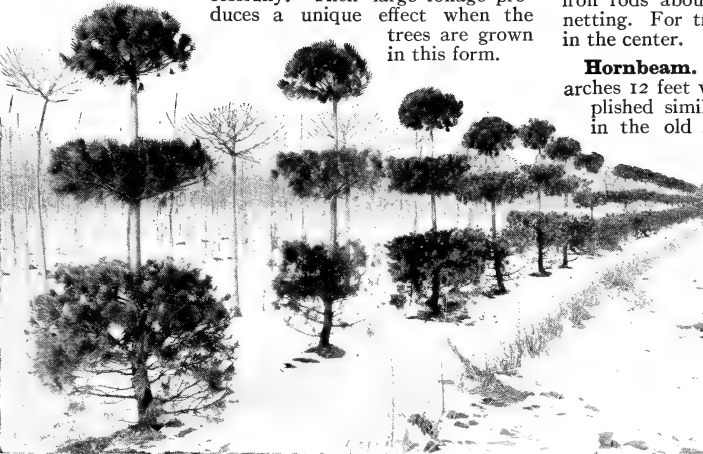


Cedar Arches at the Hicks Nurseries. The garden may be bordered with a walk like this, or the arches may be placed end to end

DOMES, continued

Japanese Barberry. See also page 39. The natural habit of this fits it perhaps better than any other shrub for training as a dome. It fills out solidly to the ground and, with very little clipping, keeps its shape. The twigs are so numerous that it looks solid in winter, when it is charmingly decorated with coral berries, persisting in their brightness until the next year's blossoms. One of its great advantages is that it is absolutely hardy, and, whether trimmed or not, it keeps in symmetrical form.

Catalpa Bungei, Bush Form. See also page 39. This is the same as the Standard, but without the stem. It makes a close dome of large, uniformly overlapping leaves. We have old plants pruned for several years. They will give a good effect in a large garden or planting in the shrubbery, especially at the seashore, where they are particularly valuable as they withstand the salt air successfully. Their large foliage produces a unique effect when the trees are grown in this form.



Trained White Pines. The oldest Pines trained in this manner in this country are at Wellesley, Massachusetts, on the grounds of the Hunnewell Estate

ARCHES

There are many places where an arch is appropriate: at the entrance to a garden or arching a path around a garden or along a terrace. Arches may be quickly made by growing vines over iron or rustic forms. Arches of vines can be alternated with the more substantial arches of Cedar, Privet or Hornbeam.

Cedar. These are made by training slender, flexible Cedars and bending them over an iron arch. It is difficult to get Cedars of this character, because they have to grow on rich ground which is not usually abandoned to Cedars. They can be readily shipped because the iron arch is connected by a right and left coupling. We have shipped many of these arches, packing each half in a crate.

Privet. California Privet makes a beautiful arch, and gives an added touch of seclusion to a garden surrounded by a tall Privet hedge. These are trained on two parallel iron rods about 18 inches apart, connected by a wire netting. For transplanting, the arches are disconnected in the center.

Hornbeam. We have Hornbeams trained to make arches 12 feet wide. A very mature effect can be accomplished similar to the trained arches of espalier fruits in the old European gardens. We offer an unparalleled opportunity to secure a very dignified and complete effect in a new garden. This is one of the most satisfactory of all deciduous trees to use in this manner, as the foliage, which turns a beautiful and harmonious shade of russet-brown, clings to the branches all winter.

SHEARED PINES

White Pine, Trained. We have trained these to uniform shapes for the past six years. In a garden devoted to topiary work, they will give effect on a larger scale than anything imported, and one impossible to produce with any other evergreen.



Young orchard at Sands Point, Long Island. From left to right, Blackberries tied to stakes; Currants, Apples; Grapes on trellis

Fruits



Dwarf apple in a Long Island garden. Fertile ground, frequently cultivated, is essential

THERE are two classes of fruit-growers on Long Island, commercial and private. This department is run for the private grower. The varieties are recommended for home use. Commercial fruit-growing on Long Island has declined because of land speculation, prospect of early sale of land, and more uniform income from market-gardening, and the development of fruit-growing and planting in other regions. However, Long Island is one of the best markets for fruit, and commercial fruit-growing can be profitably extended.

One of the reasons why a man buys a country place is to grow fresh fruits and vegetables. The first question is, "How big can I get the trees, and how quickly can I get them to bear." The second question, "What varieties should I buy?" Then the assumption is, "I have only to plant them and then pick the fruit."

You can have fruit in about eighteen months with Peaches and small fruits, and four to six years with Pears and Apples. You can gain but little by getting larger trees. Few, if any, are obtainable from nurserymen. You have got to establish the trees on your place before they will bear fruit, and it will take as long with a tree 8 feet high and $1\frac{1}{2}$ inch in diameter as with a tree 4 or 5 feet high and $\frac{3}{4}$ inch in diameter. Commercial growers find they get results just as quickly with even smaller trees. The important question is, not when you can get the first fruit, but

when you can get the first peck of fruit from a tree.

Dwarf Apples and Dwarf Pears are grafted on roots which retard the growth and induce earlier bearing. However, the advantage is slight except on very limited areas under high culture, and Long Island is not yet so crowded as to make the practice necessary.

Varieties for Long Island have been carefully tested in this establishment for the past sixty years. Like the size of the tree planted, the variety is less important than the cultivation. We have selected varieties which we consider good for home use on Long Island to cover the season.

The cultivation is ninety per cent of the work in having fruit, pruning and spraying the balance. Many fruit trees fail to reach satisfactory development because they are set in the grass and let alone, or there is a little circle kept free of grass; this is only a fraction of the root-area. Extensive experiments in England and elsewhere show that grass appears to have a deleterious influence on fruit trees greater than the amount of food required. Whatever the reason, the fact remains that satisfactory orchards are plowed, harrowed or cultivated two or three times a month during the summer. The latter half of the summer may be devoted to the growing of crimson clover or hairy vetch to be plowed under the next year for manure. The value of cultivating is not primarily to kill weeds, but to conserve moisture and



TREES FOR LONG ISLAND



FRUITS

aerate the soil, helping the bacteria to make the plant-food available. The dust-mulch, to hold moisture, is especially essential on Long Island because of the porous subsoil.

The way to start a fruit orchard for home use is to plant the trees in rows 15 to 30 feet apart, and cultivate them with a horse so as to stir the surface soil 3 inches deep once every ten days from April to August or September. If you plant them in grass, you may plan to keep a circle around each tree cultivated, but it will not be done thoroughly by hand. The circle will not be wide enough, the ground will be scraped $\frac{1}{2}$ inch deep once in three weeks, just enough to keep away the weeds. The soil will become baked and hard, allowing the ground to dry rapidly.

Planting.—In planting, cut off bruised and broken roots, dig a hole wide enough to spread out the roots, and pack the earth firmly. Cut back the top severely, nearly or quite to a bare pole. Let new branches start out to form the new framework of the tree close to the ground and avoid having them opposite because they are more liable to split when heavily laden. Many fruit trees die because the full top is left on and the roots cannot support it. Few have the courage to prune because they think they are throwing away a year's growth.

Pruning.—Pruning fruit trees is a practical subject for large commercial growers. For the home orchard it is of less importance. Keep the trees headed low, so they may be thoroughly sprayed. Keep the tops open so that the sunlight reaches all parts of the foliage and gives the fruit a good color. Head back Peach trees to keep them so that the limbs will not be long and break down. Thin out the fruit in early summer to improve the size and flavor.

With Raspberries and Blackberries, cut out the old wood after the fruit has ripened, cut out all the young suckers as they appear during the summer except a few for next year's bearing, and cut these back during the summer to keep them from getting too high.

With Currants and Gooseberries, trim out a few of the oldest branches.

With Grapes, cut back every winter, leaving 2 to 4 buds about every foot along the arms, and when the arms get old and rough, replace with a young shoot. Spray Grapes several times during the summer with Bordeaux mixture to keep off mildew and rot. Put paper bags over the young clusters to keep off fungus, and keep away the birds.

Spraying.—Spraying for San José scale is still essential, although the pest has apparently lessened in the last few years. There two efficient remedies: One is soap made of petroleum, one form of which is Scalecide, manufactured by the B. G. Pratt Co., 50 Church Street, New York. The other is a mixture of lime and sulphur boiled together. This may be secured from the Niagara Sprayer Co., Middleport, New York. There are many preparations in the trade,



Spraying insures good fruit

and you have only to ask in a seed, drug or paint store for such articles, and follow directions. A spray pump is a simple matter for a small home-orchard. A force pump and a pail is sufficient; for larger operations it had best be mounted on a barrel. For very large orchards and Elms, a gasoline engine, pump and tank on a wagon is best, or the Niagara Gas Sprayer, using compressed carbonic acid gas. It is a mysterious, disagreeable operation and people wait to hire someone or wait for neighborhood coöperation. It is not so difficult; the main thing is for every fruit-grower to get a small outfit and spray thoroughly every year. Some say, "If my neighbors do not spray, there is no use of my doing it." With the best of spraying, there will be enough to re-stock your orchard from your own.

For codling-moth, which makes wormy Apples and Pears, spray with Bordeaux mixture and arsenate of lead, when the petals of the blossoms are falling.

Borers.—Borers are serious in Peaches and on the south part of Long Island, on Apples. Dig them out with a knife, chisel and wire. The borers show on Peaches in masses of jelly filled with saw-dust, mostly at the base of the trunk at the ground. On Apple trees, the presence of borers is shown by castings also at the base.



Cutting out Peach borers. Hoe away the soil and find the borer under each mass of jelly and saw-dust



FRUITS



View in our test orchard. With clean cultivation, pruning, spraying and thinning, as fine fruit can be grown as anywhere, and the best in flavor, because ripened on the tree.
Vegetables may be grown between the trees for eight to ten years.

APPLES

SUMMER APPLES

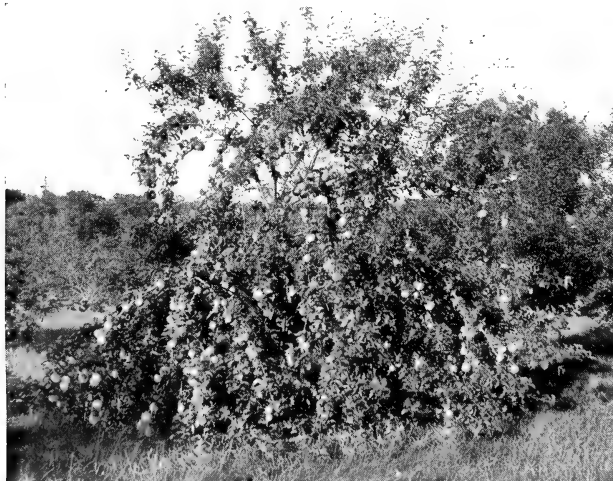
Yellow Transparent. Ripens July 20. The earliest Apple. It is like the Harvest Apple, but ten days earlier. A small tree bearing the first year or two after planting.

Harvest. Apple of medium size, pale yellow, and tender; juicy, pleasantly acid. Late July and early August.

Red Astrachan. If you can have but one early Apple, perhaps this is the best. It ripens in the first half of August. Fruit is large, deep crimson, excellent as a dessert Apple and for cooking.

Sweet Bough. Large; yellow; sweet; excellent for baking.

Oldenburg (Duchess of Oldenburg). One of the most popular Apples. Yellow, with streaks of crimson; tender, juicy, acid. Middle of August.



View in the orchard of Mrs. Martha Tabor Willets, Roslyn, Long Island

AUTUMN APPLES

Gravenstein. If you can have but one Apple tree, and want it to cover the longest season, plant Gravenstein. It will supply Apple pies from the middle of August to the last of September. It is high-flavored, yellow, covered with broad streaks of crimson.

Wealthy. Medium size; skin oily, dark red; flesh white, fine grained; juicy, subacid. Tree a free grower and early bearer. Resembles the Fameuse. October and November.

Fall Pippin. Very large; round; rich, mellow; flesh yellow, firm, tender, creamy and excellent flavor for dessert or cooking. Tree vigorous and productive. An old and well-known variety.

McIntosh Red. The handsomest Apple in the orchard. Brilliant red, taking high polish; flesh white, very tender, juicy and sprightly in flavor, closely resembling the Fameuse; fruit is very large and ripens in late September.

WINTER APPLES

Many people having room for but a half-dozen Apple trees, order winter varieties only, even when they are not at their country places in the winter. We recommend summer and autumn varieties, advising that they buy winter Apples on the market, and grow for home use the summer and autumn varieties which cannot be bought of as good quality as can the winter Apples.

Fameuse (Snow Apple). Delicious dessert Apple. Deep crimson; flesh white with crimson streaks; ripens here in November, but in Canada it is the favorite winter Apple.

Hubbardston (Hubbardston's Nonsuch). Very large; as valuable for dessert and culinary uses as the Fall Pippin. Yellow skin with russet and red streaks. This Apple should not be omitted for use in December.

Smokehouse. Large; flat; red and yellow; flesh yellow, firm, juicy, crisp and aromatic. An early and prolific bearer. Widely grown and popular. October to January.

Rhode Island Greening. Large; round; green or greenish yellow; flesh yellow and fine grained, tender, with a rich subacid flavor. A favorite for cooking. November to February.



FRUITS

WINTER APPLES, continued

Bellflower. Medium to large; pale yellow, with bluish cheek; flesh very tender, crisp, juicy, with a delicate, spicy flavor; core large. Succeeds best on rather light soils.

King (King of Tompkins County). A large, handsome red Apple of fair quality. Good grower, moderate bearer.

Spitzenburg (Esopus). Medium rich, red Apple, with crisp yellow flesh of a spicy flavor. Good keeper.

Jonathan. Of medium size; skin yellow, nearly covered with dark red; fine grained, very tender, and of excellent flavor. It commands a high price on the market. Tree needs careful culture. November to January.

Baldwin. Large; red, with yellow on one side; crisp, juicy and rich. Tree vigorous and productive. A standard variety. November to April.

Roxbury Russet. Medium or large size; russet; flesh greenish white, crisp, with a fine subacid flavor. Tree a good grower and productive. Keeps late.

Peck's Pleasant. Medium to large; waxen yellow, with bluish cheek; resembles the Newtown Pippin; flesh yellow, fine grained, crisp and brittle. We regard it as the best-flavored Apple. December to March.

Long Island Russet. A small to medium-sized yellow and russet Apple. The tree is most vigorous and productive, and the fruit keeps till May. On some Long Island soils it appears as healthy as an oak, overcoming the usual Apple enemies.

Newtown Pippin. A famous Apple, originating on Long Island. Skin dull green; flesh greenish white, juicy, crisp, with fine aroma and delicious flavor; late keeper. Tree succeeds well in the heavy loam soil of Jericho, Huntington and Port Washington. January to May.

For home use, the following will cover the season: Yellow Transparent, Red Astrachan, Gravenstein, Fall Pippin, Rhode Island Greening, Baldwin, Roxbury Russet.

CRAB APPLES

For preserving, jellies and ornament.

Montreal Beauty. Largest of its class; yellow and rich red; flesh rich, firm, acid. September and October.

Transcendent. One of the best early varieties. Golden yellow, with a red cheek. September.

DWARF APPLES

Dwarf Apples are grafted on the Paradise Apple stock, which is a dwarf, slow-growing variety. The top is fed less abundantly, causing it to grow less vigorously and to remain small. They may be planted 10 or 15 feet apart or they can be trained on a wire trellis or against a building.

The dwarf varieties we keep are as follows: **Yellow Transparent, Red Astrachan, Gravenstein, McIntosh Red, Baldwin.**

PEARS

Summer Doyenne (Doyenne d'Ete). Small; flesh white, melting, sweet. Vigorous and productive. July.

Manning's Elizabeth. Small to medium; yellow, with a red cheek; sweet and sprightly. Best early dessert Pear.

Osband's Summer. Medium size; yellow, with reddish brown cheek; flesh white, granular, with sweet flavor. Ripens in early August.

Clapp's Favorite. Large; long; yellow, with red cheek; flesh fine grained, melting, and of excellent flavor. It resembles the Bartlett, but is much earlier. It should be picked a week before it would ripen on the tree, and be ripened in the house, otherwise it softens at the center. A valuable Pear that should be in every orchard. It ripens in August.

Boussock. Large; russet-yellow; flesh melting and of excellent flavor. The tree is large and vigorous. A valuable market Pear. October.

Bartlett. The most luscious of all Pears; skin of beautiful waxy yellow, with bright red cheek; large size and fine shape; tree bears young and abundantly. It ripens in August and September, and is an excellent variety for dessert and preserving.

Tyson. Medium size; bright yellow; flesh juicy, sugary and aromatic. A regular bearer.

Sheldon. Large; greenish russet and red; flesh coarse, of fine flavor. Productive. September and October.

Howell. Rather large; waxen yellow and russet; flesh granular, with a rich subacid flavor. A profuse bearer and good for preserving.

Seckel. Fruit small; brown, with a deep red cheek; flesh very fine grained, sweet and juicy; the richest and highest-flavored Pear known. Tree of small size and slow growth. Early to mid-autumn.

Anjou. Large; green and russet; flesh white, buttery, with a rich, vinous flavor. Very productive. Oct. and Nov.



Dwarf Apple in the lawn, with a circle kept mulched with stable litter

Bosc (Beurre Bosc). Large; long; russet; flesh buttery, juicy, with rich and excellent flavor. It requires clay soil to reach perfection. November.

Kieffer. This is a descendant of the Chinese Sand Pear, and comes from the home of the San José scale; therefore it does not succumb to this troublesome pest. Its immunity and vigor render it an excellent variety for cross-breeding to improve the flavor. Large to very large; yellow-russet, with red cheek; very juicy and of a peculiar flavor disliked by some when it is not properly grown and ripened. The general appearance of the tree is distinct; its growth is exceedingly vigorous, with dark, lustrous foliage. Some Long Island farmers have found it very profitable for market. It should be severely thinned when the fruit is small. December.

Winter Nellis. Medium size; dull russet; flesh fine grained, with a rich, sprightly flavor. Nov. and Dec.



FRUITS

DWARF PEARS

The following varieties, grafted on Quince roots, succeed as Dwarfs, and are valuable for small gardens:

Clapp's Favorite. See description under Pears.

Bartlett. See description under Pears.

Louise Bonne de Jersey. A large, beautiful yellow Pear, with a red cheek; rich flavor. Vigorous grower and an abundant bearer. September and October.

Angouleme (Duchesse d'Angouleme). One of the largest of the good Pears. October and November.

Anjou. See description under Pears.

PEACHES

For early bearing and general satisfactory results, no fruit tree excels the Peach. They will commence to bear eighteen months after planting, and produce abundant crops nearly every year. Fertilize with wood-ashes or potash. A new supply of trees should be planted every two or three years, in order to keep up a succession. This list is nearly in order of ripening.

The same skill that has developed the vegetable-growing of Long Island to its high position will make the poorer land of Long Island profitable with Peaches. The local market is never supplied. The railroads should coöperate to develop an extensive Peach industry on the hills of Suffolk county.

Carman. Large; oval; white with a red tinge; flavor spicy. July.

Belle of Georgia. A large, white Peach with a red cheek. Flesh firm, of delicious quality. August.

Early Rivers. Large; white; juicy.

Champion. Large; creamy white and juicy. Said to be one of the most frostproof of Peaches. An excellent early Peach.

Mountain Rose. Above medium size; round; white. Tree thrifty and an abundant bearer.

Early York (Honest John). A large, beautiful, white Peach. A valuable variety.

Foster. A very large Peach, resembling Crawford's Early, but earlier in ripening.

Crawford's Early. A magnificent, large, yellow Peach of good quality; tree vigorous and productive. September.

Oldmixon. A productive variety that succeeds well in all localities. Flesh white, red at the stone, flavor excellent. A favorite canning variety.

Wheatland. Considered an improvement on Crawford's Late, and ripening just in advance of it.

Stephen's Rareripec. Large; oblong; red skin; white flesh. A heavy bearer. October.

Reeves' Favorite. Large; yellow; juicy, melting, with a vinous flavor.

Elberta. One of the finest yellow Peaches; very large and handsome; juicy and of fine flavor.

Crawford's Late. A standard variety. Large; yellow, red at the stone.

Stump the World. Medium size; creamy white; juicy and high flavored. Unexcelled for preserving.

Chair's Choice. Large; yellow, with red cheek; flesh firm and of good quality. The large Peach-growers of Long Island report that this is a valuable variety.

Globe. Large; golden yellow; firm; sweet and delicious. A rapid grower and good bearer.

Smock. Medium to large; yellow; moderately juicy to dry; very late; sometimes it does not ripen here.

JAPANESE PLUMS

This class of fruit we have thoroughly tested, and strongly recommend planting in gardens and orchards. After one or two years, the trees bear heavy annual crops.

The peculiarly desirable features presented by these Japanese Plums, on conservative estimate, are earliness and great productiveness. The quality is good when well thinned and ripened, but not always equal to the best of the European Plums.

Abundance. Medium to large; globular; yellow, mostly covered with red; flesh firm and juicy, sweet and good when fully ripe. The tree is very productive, and the loads of fruit that young trees carry astonish all who see them. The fruit should be severely thinned out and the branches tied up. Ripens in early August.

Apple. One of the good varieties introduced by Luther Burbank. The fruit is large and attractive, of a deep reddish purple color when fully ripe; flesh red and firm, with a small pit and of very good flavor. It ripens about the same time as the Burbank, and is an excellent keeper. We recommend this as the finest-flavored Japanese Plum.



View in the Peach orchard of F. A. Serrine, Riverhead, Long Island. Mr. Serrine came to Long Island as Entomologist of the New York Agricultural Experiment Station, having charge of the Long Island Branch. About ten years ago he started orchards of Peach, Plum, Apple and Pear. His success demonstrates that modern scientific methods will grow perfect fruit on Long Island.



FRUITS



The fruit should have been thinned out early in the summer to improve the size, flavor and color

JAPANESE PLUMS, continued

Burbank. Medium to large; yellow, with red cheek; flesh firm, rich and sugary; the best-flavored variety we have ever tested, excepting the Apple Plum described before. The tree is very productive. Last of August.

Wickson. The largest Japan Plum. Maroon-red; flesh firm and long keeping, of good quality.

Hale. A handsome, globular, red-speckled Plum. Flesh soft and juicy, of good quality and peach-like flavor. Tree a good grower and productive.

Satsuma. Large; very dark red; flesh blood-red, acid, of fair quality when fully ripe. Productive and late.

October Purple. A reddish purple Plum of large size; good quality. Its late-ripening and good-keeping qualities make it one of the desirable varieties.

EUROPEAN PLUMS

The varieties of the common, or European Plum (*Prunus domestica*), do best on heavy land, but will grow well on any soil, if given applications of ground bone and potash.

Bradshaw. Fruit large, oval, reddish purple; flesh yellow, rather coarse, juicy and good. Tree very vigorous.

German Prune. Fruit long-oval; purple, with white bloom; flesh green, sweet. Tree a poor grower.

Green Gage. Round, small, green fruit; the flavor is exceedingly sweet and rich, unequaled by any other. A small, compact tree.

Lombard. Medium to large; dark red; flesh deep yellow, of pleasant flavor, but not rich. The tree is one of the most vigorous of the Plum family and is productive and well adapted to light soils.

PERSIMMON, AMERICAN

A large, handsome tree, with lustrous leaves. Skin and flesh of fruit brick-red, soft and sweet after frost. Native to wet ground on Long Island.

QUINCES

Champion and Orange. Large; bright yellow; good quality and long keeping.

CHERRIES

The Cherries are among the most satisfactory fruits to raise for home use. They grow well on all Long Island soils, and annually set large crops. Cherries may be divided into four groups:

HEARTS. With soft flesh; heart-shaped; sweet. The dark red varieties are in this class. This and the next are sometimes called "Oxhearts."

BIGARREAU. With hard flesh; heart-shaped; sweet; mostly of the lighter colors.

DUKES. Like the above in size and color, but with acid or subacid fruits.

MORELLOS. (Sour Cherries.) Flesh sour; tree smaller than the others, with slender branches and narrow leaves.

HEART CHERRIES

Governor Wood. Large, heart-shaped, yellow fruit, marked with red; sweet, juicy flesh. A rich and delicious Cherry.

Coe's Transparent. Medium size; amber color, with a red cheek; very tender, melting, sweet. Ripens early, just before Black Tartarian. Tree thrifty.

Black Tartarian. Fruit very large, nearly black. Flesh dark purple, firm, sweet and juicy, with a small pit. Tree a rapid grower. The long, upright branches of this variety, hung with luscious fruits, are a beautiful sight.

Downer's Late Red. Medium size; red and amber; flesh tender, melting, rich; not good till fully ripe. This variety is late and the fruit hangs on the tree after it is ripe without decaying, as do many other kinds. Ripens first half of July. The birds molest it but little, as it ripens about the time of the wild Mazzards.

BIGARREAU CHERRIES

Rockport. Large; clear red, shaded with amber; flesh firm, juicy, sweet, rich. Ripens early. Tree upright and vigorous.

Yellow Spanish. Very large, often an inch in diameter; waxen yellow, with a light red cheek; flesh firm, and of fine, rich flavor.

Napoleon. Very large, heart-shaped; pale yellow and amber, shaded with deep red; flesh very firm and of good flavor. Ripens after midseason. Tree vigorous and productive.



Japanese Plums



FRUITS

BIGARREAU CHERRIES, continued

Windsor. Large; mottled red; very firm and juicy, of good quality. The tree is upright, vigorous, and a heavy bearer. A desirable late Cherry, as it hangs a long time and rots but little.

Mercer. A very dark red Cherry; productive and early; of good flavor, and not liable to rot.

Schmidt's. The largest of all the black Bigarreau Cherries. The fruit grows in clusters; the flesh is dark, tender and very juicy.

DUKE CHERRIES

May Duke. Large, round; red, changing to nearly black when ripe. Flesh very juicy and melting; acid. Quite early.

MORELLO CHERRIES

This class is excellent for cooking and preserving.

Early Richmond (English Pie Cherry). Small to medium in size; beautiful red; very juicy, acid. Tree productive.

Montmorency. Large, round; bright red; moderately sour. A good bearer, which fruits young. One of the best of its class.

Morello (English Morello). Medium to large; dark red to nearly black. Flavor a rich acid, with some astringency, making it desirable only for cooking. It ripens after mid-summer.

MULBERRIES

Downing Everbearing. Large, black, sweet fruit. A handsome shade tree.

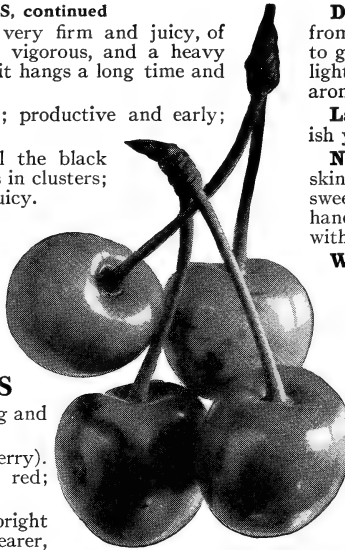
GRAPES

Grapes are easily grown by any one, and on the smallest bit of ground. There is room along any garden fence or walk for a dozen vines to furnish this most delicious of fruits for home use, from August to November. Training on the sides of buildings is recommended, as the fruit is less liable to decay.

The vines will fruit under unfavorable conditions, but good culture, pruning and spraying pay, if fruit of best quality is desired. Commercial Grape-growers find it necessary to spray with Bordeaux mixture occasionally during the growing season, to keep in check mildew on the foliage, and rotting of the fruit. Protecting the clusters, as soon as formed, by pinning over them two-pound paper bags, prevents injury from fungus, storm and birds and results in large, perfect clusters.

Cottage. Bunch small; berries very large; black; pulp tough and sweet. A good early black variety.

Moore's Early. Large; black; good flavor.



Cherries

Delaware. This early Grape is very distinct from all others, and worthy the care necessary to grow it. Bunch and berry small; skin thin, light red, translucent; exceedingly sweet and aromatic.

Lady. Bunch and berry medium size; greenish yellow; tender and sweet; early.

Niagara. Bunch large, compact; berry large; skin pale yellow, or white; flesh tender and sweet; vine vigorous and productive. The handsomest white Grape, ripening in midseason, with Concord.

Worden. Berry very large; black; skin and pulp tender and sweet. Ripens ten days ahead of Concord and is superior in quality.

Green Mountain. Berry of medium size, white; pulp tender, juicy, very sweet and rich.

Diamond (Moore's Diamond). Berry large, white, translucent; flesh juicy and almost without pulp; quality very good. Vine vigorous and productive.

Concord. Bunches compact, large; berries large; skin black and tender; flesh juicy and sweet. Extreme hardiness, vigor, productiveness, and the fine appearance of its clusters have rendered Concord the most popular Grape.

Herbert. Berry medium size; black; tender; sweet and rich.

Salem. Bunch and berry large; dull red, tender, of good flavor.

Agawam. Bunch and berry large; dull reddish brown; flesh tender.

Pocklington. A light golden yellow Grape of good quality, ripening after Concord. A strong grower.

GOOSEBERRIES

Gooseberries thrive in any garden soil, and are very satisfactory for home use.

Downing. Medium to large; pale green; very good; bush upright, spiny, productive.

Chautauqua. Bush very vigorous. Fruit large, smooth, translucent; sweet in flavor and produced in very great profusion.

Industry. The best foreign variety. Berry very large, dark red. Bush vigorous, healthy and productive.

CURRANTS

Currants are easily grown and are naturally fruitful. The worm is readily controlled by hellebore powder, and San José scale by Scalecide.

Cherry. Very large, dark red berries; clusters moderately short; quite acid. Very for jelly.

Fay's Prolific. Very large berries on long stems; sprightly and acid; easily picked. A most popular variety.



Grapes growing in the Peach orchard shown on page 90. Note that in pruning only a few buds were left. These have made a few vigorous branches which have been tied up to give each room.



CURRENTS, continued

White Grape. Large, beautiful white berry; bunch short; quality excellent. One of the most pleasing Currants to eat off the bush, as it is of much sweeter flavor than the others.

Black Naples. Black; large bunches; berries small, with a strong, musky flavor. Valuable for cooking and jams.

RASPBERRIES

Raspberries are an essential in the home garden. The principal attention is to hoe up the extra suckers, leaving a few stalks to each hill. The plants should be set in rows 6 feet apart and 3 feet apart in the row.

Red and Yellow Raspberries

Miller's Red. Berry large, firm, bright red.

Marlboro. Bright scarlet fruit of large size. Early.

Cuthbert. Very large, pointed, deep red berries of delicious flavor. This beautiful variety should be planted largely. Ripens midseason to late.

Golden Queen. Yellow, soft, juicy, sweet fruit. Resembles Cuthbert in form and flavor, and therefore is an excellent dessert variety.

Blackcap Raspberries

These ripen earlier than the red kinds, and follow Strawberries.

Soubegan. Fruit large and handsome; plant a strong grower and hardy, bears fruit in great profusion. Ripens early.

Gregg. One of the largest of the Blackcap family; fruit large, black, with a slight bloom; moderately juicy, sweet and rich. Ripens late and evenly.

BLACKBERRIES

Being easy to grow, Blackberries are a valuable fruit for home use.

As they ripen from early July to the middle of August, they complete the season of small fruits until the Peaches begin to ripen. To avoid too strong a growth and straggling habit, cut off the ends of the shoots at 3 feet in midsummer. Plant 6 x 3 feet.

Lucretia Dewberry. Large, coreless, juicy, sweet fruit; most delicious for the table. Ripens before all the others. A running Blackberry that can be trained to a trellis.

Erie. A valuable new variety; large, very early and productive. Fine market berry.

Early Harvest. Of medium size, good quality and prolific; very early. It is firm and therefore a good shipper.

Snyder. Berries of medium size, nearly globular, of good flavor; very hardy.



Plant Blackberries in rows 3 to 6 feet apart



Gooseberries such as these are as easily grown as Currants

STRAWBERRIES

A garden without Strawberries is incomplete. If Strawberry plants are put out in August and September, they will bear fruit the following June. They may be planted in April and May, and each plant allowed to make a dozen or more runners and young plants, which bear freely the following season. The beds had best be allowed to fruit only two years and then be renewed. Free cultivation should be followed the first year, and the plants covered with straw, manure, or salt hay for the winter. In the spring, as the growth commences, this litter may be raked off between the rows to form a mulch, which prevents the growth of weeds and conserves the moisture, as well as protects the ripening berries from the soil. Clippings from the lawn make an excellent mulch for this purpose. By planting four or six varieties, early, medium and late, and giving them good cultivation, the fruiting season will extend from the last week in May to the first week in July.

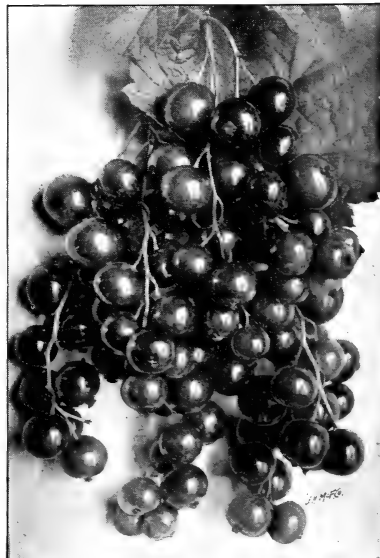
PER. indicates perfect-flowered.

IMP. indicates imperfect-flowered. Plant with perfect-flowered varieties near, so they will set fruit.

Excelsior. Per. A firm, productive, high-colored berry; the chief quality is earliness.

Sharpless. Per. Very large, conical or wedge-shaped; white at the tip when not fully ripe; good flavor. One of the best sorts for the home-garden.

Bubach. Imp. Fruit of largest size and excellent flavor. A prolific grower with vigorous foliage. A standard sort.



Twenty Currant bushes will give plenty of fruit for a family



FRUITS



The most economical way to grow Strawberries is in a matted row kept cultivated with a horse cultivator. They are planted in spring and the runners allowed to take root and make a row about a foot and a half wide. For home use hill-culture is preferred by some. In this system they are planted in August and September and no runners allowed to form. Mulching with lawn-clippings keeps the fruit clean.

STRAWBERRIES, continued

Bismarck. Per. This resembles the Bubach in its excellent qualities and is slightly smaller.

Clyde. Per. Fruit large, abundant, mild flavor. Foliage not so strong as some others.

Gandy. Per. One of the latest, if not the latest in cultivation.

Glen Mary. Per. A long, tapering fruit of mild, sweet flavor. This variety is delicious for the table, but not sprightly enough for preserving.

Nick Ohmer. Per. A vigorous grower; an extra-large berry of splendid color; handsome and of good market quality.

GARDEN PLANTS

ASPARAGUS, Conover's Colossal. Extra-large fine-flavored and very tender.

RHUBARB, Linnæus. Early, tender and very large, possessing a rich flavor. Rhubarb is easily forced in a box of soil in the cellar.

HOPS.

SAGE, Broad-leaved. The tender leaves and tops of this plant are used in sausage, in stuffing, and in sauces.

THYME. Used for flavoring.

HORSE-RADISH. A few roots will give a supply of this fine relish.

Some Insects and Fungus to Expect in 1912 on Long Island, and How to Overcome Them

San Jose Scale on fruit trees, currants, double-flowering fruits, and Japanese quince. Spray with lime-sulphur solution or scalecide when dormant, preferably both in November and during the winter. **Codling Moth**—a worm in apple, pear and quince. Spray with arsenate of lead and Bordeaux mixture immediately after the blossoms fall, and ten days later. **Curran Worm.** Hellebore, dry or sprinkled on with water. **Tent Caterpillar.** Burn with kerosene torch. **Grape Rot and Mildew.** Bordeaux mixture when the buds first swell and at intervals later. **Brown Rot** on peach and plum. Summer spraying with lime and sulphur. **Apple Maggot, or Railroad Worm.** Destroy all infested fruit. **Cucumber, Muskmelon and Celery.** Spray every ten days with Bordeaux mixture. **Rose Aphis and Leaf Hopper.** Spray with kerosene emulsion or tobacco-water. **The Fall Web-Worm.** Webs may be cut off, or the trees sprayed with arsenate of lead. **Army Worm.** This may appear. Migrations are easily checked by plowing deep furrows and digging deeper pits at intervals. **Rhododendron Lace-Wing Fly,** see page 57. **Elm-Leaf Beetle,** see page 8. **Hickory Borer,** see page 95. **Chestnut Bark Disease,** see page 95. **Apple and Peach Borer,** see page 87.

Before spraying, get literature. Write to the Department of Agriculture, Washington, D. C., the Director of the New York State Agricultural Experiment Station, Geneva, N. Y.; and the Cornell College of Agriculture, Ithaca, N. Y. For materials, The Grasselli Chemical Co., 60 Wall St., New York City, The Sherwin-Williams Co., 50 Church St., New York City, and Bowker Insecticide Co., Boston, Mass.

For pumps, The Deming Co., Salem, Ohio; E. C. Brown Co., Rochester, N. Y.; Field Force Pump Co., Lockport, N. Y.



Nut Trees



The Hazelnut ripens its delicious nuts in September

COMMERCIAL nut-growing has reached a high development with the English Walnut in California, the Pecan in the lower Mississippi Valley and the South Atlantic States, and the grafted varieties of the Chestnut in Pennsylvania.

The possibilities of nut-culture are as little developed as any use of the earth's surface. The available knowledge of nut-culture in the northeastern states is very slight, and you can contribute a share by experimenting.

The easiest and quickest thing to grow is the Hazelnut. We have a quantity of young bushes which are bearing in the nurseries. They are healthy and vigorous, and will take care of themselves on dry ground and look better than most of the flowering shrubs in a drought. Plant twenty-five of them 4 feet apart in your shrubbery border, and you will harvest a crop the second year. The English Filberts have been developed into many named varieties. They occasionally bear well here, but are liable to be severely injured by a fungous disease on the branches.

The Chestnut-bark disease, *Diaporthe parasitica*, an early description of which was in a previous edition of our catalogue, has spread from New York to Pennsylvania, Maryland and Massachusetts. Pennsylvania has appropriated \$273,000 to endeavor to check its spread.

We have given up the culture of the American and European Chestnuts and the Chinquapin. We have a few Japanese Chestnuts. These are attacked, also, but to such a slight degree that it is practical to keep them alive and bearing by cutting out the diseased spots to beyond the diseased tissue, and painting with tar.

For literature, send to Dr. Haven Metcalf, United States Department of Agriculture, Washington, D. C. The only thing to do is to cut the Chestnut timber as soon as possible before it decays, and utilize it for telegraph-poles and lumber. We are frequently asked what to plant to take the place of the Chestnut around residences, where a tall tree is needed. We have trees of Pin Oak, Maple, White Pine and others, 30 feet high. On one large Long Island estate, 250,000 small forest trees have been planted, such as White Pines, Red Oaks, Tulip Trees and Locusts.

The Hickories are among the most dignified lawn and shade trees. They are considered difficult to transplant and slow to grow. That is no sufficient reason for not trying them. It is best to start with young trees. In a few years there will be improved varieties with larger nuts and thinner shells. Some Hickories are dying from a bark-borer. This is attacking comparatively few trees, and is not so serious as the Chestnut disease. The borers are attacked by woodpeckers and an ichneumon fly, a wasp-like insect that forces its ovipositor through the wood and lays an egg in the borer. Send for literature to Dr. E. P. Felt, State Entomologist, Albany, New York, who advises prompt cutting and burning of the trees as soon as affected, and before the adult beetles emerge from the numerous holes in the bark.

The northern varieties of the Pecan are hardy on Long Island. There are two bearing trees, fifty years old, at Westbury, Long Island.

Of the Walnuts, there are four species successfully cultivated on Long Island. Black Walnut, English Walnut, Japanese Walnut and Butternut. There has been no serious trouble develop with their culture and there is no serious objection to their use in landscape planting. They are not, however, such handsome trees as the Hickory, Chestnut, Oak, Linden, Maple or Tulip Tree.

For further information on Nut Culture, see "The Nut Culturist," Fuller. Orange Judd Co., and Northern Nut Growers' Association, Dr. W. C. Deming, secretary, Westchester, N. Y.

CHESTNUT, Japanese (see p. 6.) · **WALNUT, Japan** (see p. 21).

HICKORY, Shagbark (see p. 8). **Black** (see page 21).

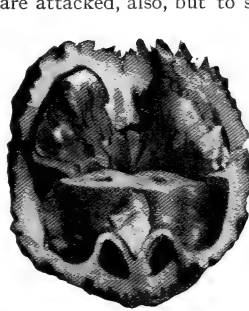
Mockernut (see page 8).

Pig Nut (see page 8).

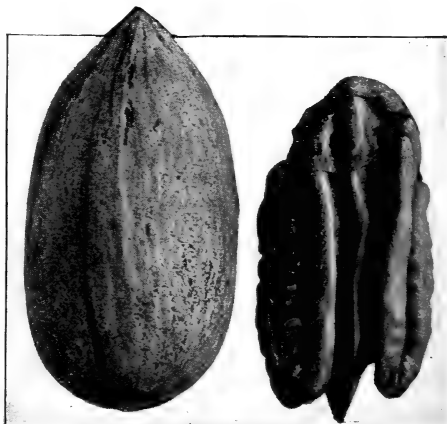
PECAN (see page 8).

BUTTERNUT (see page 21).

HAZELNUT, American (see page 41).



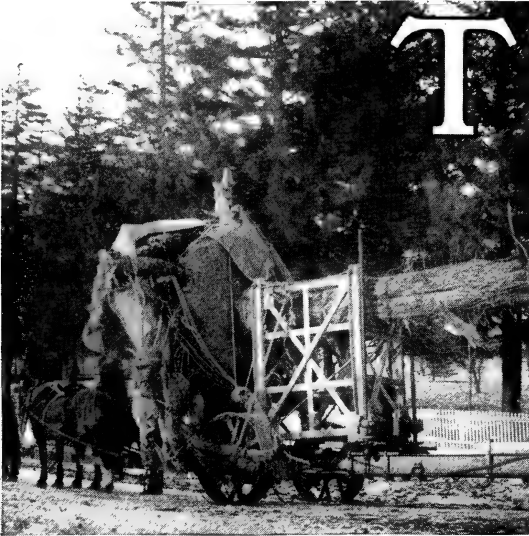
The Black Walnut has a large meat that comes out of the shell easily



Pecan Nut. The northern form is about half as large as the improved southern varieties



Tree-Moving Department



The ball of earth 6 to 10 feet in diameter has roots radiating from it 30 to 40 feet wide. Tree-mover No. 20, all steel

THE transplanting of large, old trees has reached a very high development at the Westbury Nurseries. Machines have been invented, tested, discarded or improved for the past forty years. There has developed a fund of accurate information as to the results with various species and individual trees when moved in different ways and under various treatments during convalescence. This store of knowledge is yours for the asking. But do not get accurate advice and then leave out the essentials, and have the trees grow poorly, making an ugly blot on the landscape, or die.

Transplanting is a surgical operation and, therefore, on an important tree it should be done with the greatest skill with the most improved apparatus and receive the best care. For important citizens, the most skilled surgeons are consulted.

The development of the tree-moving machinery is under the charge of Edward Hicks, who started the work in 1870, moving trees to make a shelter-belt for the arboretum of the late Charles A. Dana, and planting in Garden City, where the late A. T. Stewart was founding a village on a treeless prairie.

We have foremen who have been at the work ten to twenty-two years and several crews of men who have had five to ten years' experience. They have reached a high degree of skill in dissecting out the fibrous roots and operating the tree-movers. As we keep one hundred men the year round, these crews are available at any time. It is only

by operating a nursery of large trees that it is possible to have such trained men available at all times. As they develop skill by working in the nursery,



The superintendent said that our 16 horses started together as if you had thrown the lever. This tree was 75 feet broad, 52 feet high, 24 inches in diameter, 45 feet spread of roots. Note the wheels 2½ feet wide, to enable the tree to be pulled across plowed ground. The rear wheels are steered by a wheel, enabling trees 80 feet high to get around sharp corners. Where teams could not pull it direct, they were put on a wire cable and pulleys which multiplied the power.

they are promoted to the tree-moving crews. We send out full crews, or we can send out a small crew of foreman and three to eight experienced men to work with the local inexperienced men of two or three times the number. We can send out all the teams necessary, these being horses trained to pull together, or we can use local teams.

We have sometimes had out five crews scattered from Massachusetts to Virginia, besides several working on Long Island. The extra expense for freight, carfare and board is overcome by the adequate apparatus, skillful, quick work, and knowledge of what is best to move and not to move. For these distant jobs, it is best to have several trees moved, so as to distribute the expense of freight on the apparatus.



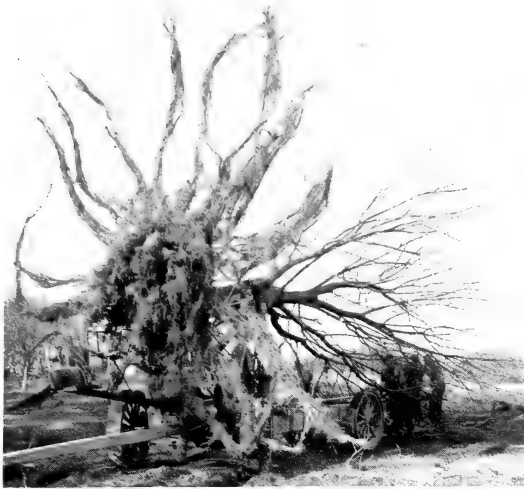
The traction engine has advantages over teams under some circumstances, in pulling a tree more slowly underneath wires, stopping just where wanted and allowing them to be disentangled. The traction engine can pull out of difficult places by anchoring a cable ahead, and winding on a windlass, pulling both itself and the trees.



TREES FOR LONG ISLAND



TREE-MOVING



Most of our tree-moving is of this character. Four horses, and trees with roots and tops spreading 30 feet. With our well-trained men and teams, this is a simple and quick operation, which we can perform with economy and certainty.

The time to do tree-moving is a matter to be arranged by correspondence, according to the climate, soil, condition of the roads and species of trees. In general, deciduous trees may be moved either in the fall or in the spring. From New York southward they may be moved all winter by mulching the ground to keep out the frost. In a case of necessity, deciduous trees can be moved in midsummer, using, however, a large ball of earth and wrapping the outer roots carefully to keep them damp while the foliage is so rapidly drawing moisture.

Large evergreens have to have a ball of earth because the foliage is drawing sap from the roots all the year, therefore they may be moved at any time. In moving Pines and Firs from May 10 to July 15, the new growth is liable to wilt and curve down. It does not injure the tree, except to give it an unusual appearance for the balance of the year. In August and September, and in December, January and February, we move many large evergreens. Send for Hicks' "Evergreens for August and September Planting," and "Planting Large Evergreens in Winter."

For moving large deciduous trees, we have developed the method of dissecting out the roots for a spread of 30 to 45 feet in width, leaving a ball of earth in the center, 6 to 9 or more feet in diameter, as shown on page 96.

The old method was to take only the central ball of earth, 6 to 8 feet in diameter. This resulted in the widespread opinion that moving large trees was a failure, or at best a temporary expedient because they grew slowly, looked unhappy, and small trees, the size usually transplanted, quickly overtook them. This old method with the ball of earth 6 to 8 feet in diameter on a Maple or Elm, 8 inches in diameter, 25 feet high, and 12 feet spread, is sufficient to keep the tree alive and in fertile, moist soil, or where properly watered, trees recover after a while and make a fair growth; but it is unnecessarily expensive to move the heavy ball.

On larger trees, such as we move, 14 to 24 inches in diameter, 40 to 70 feet high, with 30 to 50 feet spread of branches, such a ball of earth, 6 to 8 feet in diameter is not sufficient, and the trees are very liable to die or to lose part of their top or to look sick and thin for many years. The many failures widely scattered over the country resulting from moving large shade trees with inadequate roots, has been the greatest factor in preventing people from undertaking the planting of large trees.

Whatever else the American people want, they invent the methods and secure the capital necessary. In art and

architecture, transportation, and other engineering lines, this is especially the case. In making expenditures for grading, garden walls and terraces, roads, streams, lakes and fountains, the results fail to reach their most beautiful development, because of the lack of large trees.

Landscape is of three dimensions: length, breadth and height. Planting only small trees results in a ground-plan for the future. No other work of art suffers this delay. Planting large trees gives elevation against the sky and broad shadows on the lawn. It frames beautiful vistas and shuts out undesirable views.



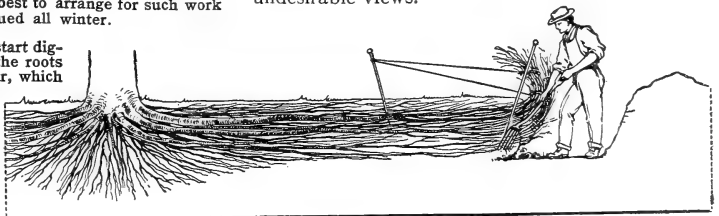
Loading tree-movers on cars. A large part of our work requires shipping apparatus. It may take a week's time for it to arrive. Therefore, it is best to arrange for such work early in the season. This job took five tree-movers and continued all winter.

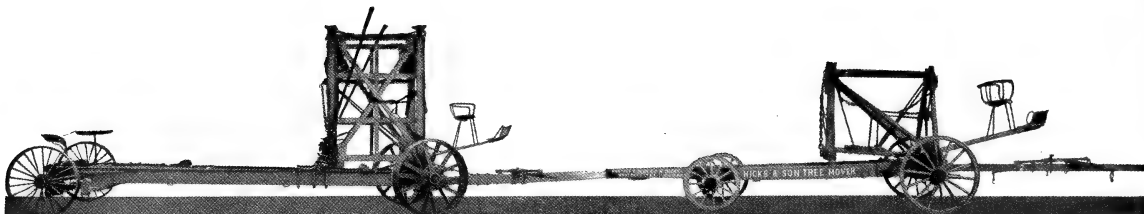
The method we have invented for digging large trees. We start digging 15 to 20 feet away from the center, digging down to below the roots and make an undercut, dissect out the soil with the picking bar, which is shown beside the fork. The soil is also picked out with the fork which has had the tines rounded to lessen scraping the roots. As the roots are uncovered, we tie them in bundles and bend them up out of the way. We proceed in this manner untying the bundles of roots, straightening them out and tying them up again, keeping as many as possible unbroken. Every root has many chances to be broken off, and it is only by skillful, patient work that enough roots are preserved to make tree-moving a success. There are some soils on which it is not practical to get enough roots to move a tree successfully.



Residence of Mr. C. A. Coffin, Locust Valley, L. I.

Each bundle of roots contains several hundred small roots. These are spread out and occupy an area 30 feet wide. Area of such a circle is 675 square feet. Had this tree been moved in the old way with a ball of roots 10 feet in diameter, the area would be 75 feet or one-ninth as much.





No. 2L

TREE-MOVERS

No. 2



A frequent method of delivery. The truck in front has large Cedars and Pines and the tree-mover has a Norway Maple, 8 inches in diameter, 20 feet spread of roots and top. Frequently the truck in front has benches on which are carried two or more deciduous trees, 20 to 30 feet high.

wanting trees can look them up, and have us inspect them economical. Many make the mistake of selecting poor trees because they are near-by. They do not know how to select the best trees. It is better to go ten miles and get the best possible trees, as distance adds but little to the total expense. The principal expense is skillful digging, transporting and planting.

First, the tree should be of a species easy to move, as Maple, Elm, Linden, Pin Oak, Locust, Horse-Chestnut, Wild Cherry, Birch, Dogwood, Catalpa, Willow or Poplar. Species less easy to move, or about which little is known, are Walnut, Hickory, Scarlet Oak, Black Oak, White Oak, Liquidambar and Beech. The soil is important. The best is a loamy soil, easily dug to the depth of 3 feet. Still better is a sandy loam, underlaid by sand. In such situations the roots are numerous and flexible. That is what we have in Westbury, and is one reason

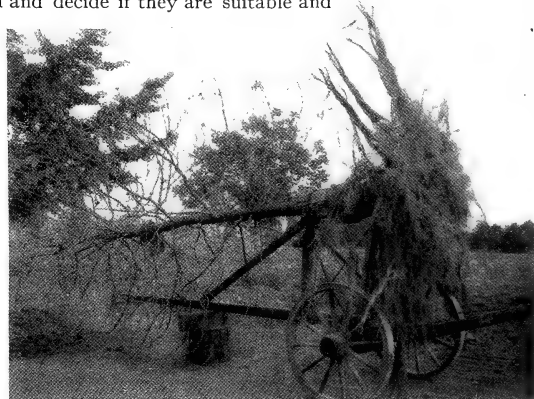


When a tree is to be moved but a few feet, we push under used for large evergreens, and move timbers. This tree was 3 feet in diameter of 40 feet. In cases of trees being moved where changes are made in streets and trees without shipping a tree-mover, rollers and other special tools, and getting timbers in the vicinity.

When a tree is to be moved but a few feet, we push under used for large evergreens, and move timbers. This tree was 3 feet in diameter of 40 feet. In cases of trees being moved where changes are made in streets and trees without shipping a tree-mover, rollers and other special tools, and getting timbers in the vicinity.

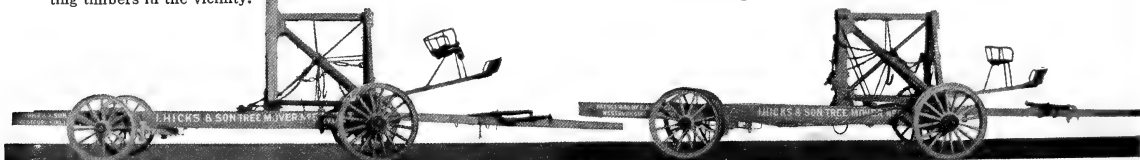
Planting large trees is not an extravagance for the wealthy,—a risky experiment which only they can afford. A house costing \$6,000 has a porch costing \$300. It is quite in keeping to shade the porch, connecting the house with its surroundings by planting a tree twenty years old, 25 feet high, 15 feet spread, 7 inches in diameter at \$75. For a house costing \$20,000, half a dozen such trees would be in keeping, or two or three larger trees for the same amount. An investment in large trees will accomplish more than grading. In fact, grading can be done with trees and shrubs rather than soil. That is, skillful disposition of solid masses of foliage will obviate the necessity for some grading.

Large trees may be supplied in two ways: We can ship from our nurseries trees up to 30 feet high and 15 feet spread of branches. We can look up large trees within ten or fifteen miles of where they are wanted, and make a report, with photographs of the trees available. Persons and decide if they are suitable and



Two-wheeled tree-mover with one of the hundreds of extra-size trees sent out from our nurseries. Maple 7 inches in diameter, 28 feet high, 16 feet spread of tops and roots. We now can supply and plant such trees grown in our nurseries cheaper than you can look up similar trees in your vicinity, and have them moved, especially if you use the old method of moving with a ball of earth 6 feet in diameter and two teams of horses. With one team and five men we can deliver three such trees fifteen miles and plant in one day. Two of the trees will be on a bench mover and the two-wheel mover behind.

why trees shipped from our nurseries are successful. The bundles of roots are like whip-cords, and enough of them are preserved to give the tree a good start. Types of soils to avoid are those of the rocky nature, with numerous stones between which the roots have been crowded, as the roots are likely to be few and easily broken. In some regions, the best-looking trees are on the ledges of rock, all the other land having been cleared. Swamps may supply good trees. Where the water is at the surface part of the year, the roots are only 6 inches deep and the trees have comparatively few roots. They will do, but it is better to get them where the roots are 2 feet deep. If the water is at a lower level and never comes high enough to kill the bottom roots, then the trees have numerous fibrous roots to the depth of 2 or 3 feet and are ideal for moving. Such trees are usually found along



No. 5

98

No. 6



No. 8

TREE-MOVERS

No. 14



Loading barge with Norway Maple trees from our nurseries, 8 inches in diameter, 26 to 30 feet high, for shipment to Connecticut. Many of our deliveries are made in this way. It assures quick, safe transit. Large quantities of trees can be delivered for small cost per tree. We have shipped large Oaks and Pines from our nurseries, each requiring a tree-mover and four horses, by running the tree-movers on the barge.

meadow-lands or river-bottoms; up on the hillsides the soil may be too thin and rocky to supply suitable trees, or may be all right.

The age and physical condition of the tree is important. A tree which is growing thriftily is better than an old, stunted tree of the same size. This is determined by the annual growth. Look to the top of the tree and see if the last year's growth was 12 inches long or 2 inches. A short growth does not veto the use of a tree, because after moving, it should have a better supply of food and water so it will grow more rapidly than before.

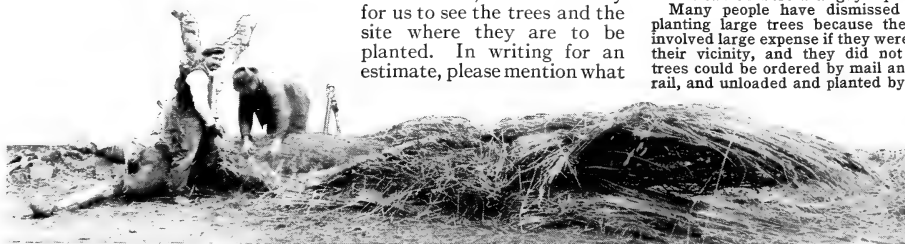
Prospective planters will find it a lot of fun to look over their region hunting for suitable trees and shrubs. It is a method which develops the most harmonious landscapes and, if done with judgment, at the greatest economy. The smaller shrubs and trees will not need a tree-mover, and can be transplanted by the men and teams on the place. We shall be glad to give advice on these points. The most failures result from taking trees with little roots and not trimming the tops enough. Another frequent mistake is taking trees from thickly crowded woods. Such trees have but few roots and have tall, bare stems and narrow tops. The weak lower limbs die after transplanting, and what looked like a fairly good tree is nothing but a pole after planting, requiring severe cutting back and several years' growing before it is presentable. As described under Pin Oak, page 18, such Oaks may be used for thick groups.

If you contemplate moving large trees from your vicinity, start in advance of the planting season to look them up. Write us, describing size and other conditions. Send a photograph if possible. We can then give you an approximate estimate of the cost to be used as a guide. Before our taking the contract, it is necessary for us to see the trees and the site where they are to be planted. In writing for an estimate, please mention what



Unloading carload of Maples 7 inches in diameter, 24 to 30 feet high, 15 feet spread of roots and top. It is generally practical to unload these by hand without use of derrick. Derricks are of simple construction—simply one or two timbers with guy ropes.

Many people have dismissed the idea of planting large trees because they thought it involved large expense if they were moved from their vicinity, and they did not realize that trees could be ordered by mail and shipped by rail, and unloaded and planted by local men.



Packing a tree 7 inches in diameter, 28 feet high, 15 feet spread of roots and top. The roots are wrapped in moss, straw and burlap, the top being folded together and wrapped in straw. Single trees can be shipped this way a distance of a thousand miles.





Tree-mover No. 21, all steel. Estimated capacity, 30 tons. With this we can move very large evergreen trees with a heavier ball of earth than has heretofore been practical. Wheels are very wide and can be made wider as shown on page 96. This mover is another illustration of the fact that we invent and build whatever is necessary to move trees. Plans are drawn for types of apparatus not here shown, in case they are needed.

The limits to the size of a tree which can be moved are mainly mechanical. Is the tree in healthy, vigorous condition? Can food and water enough be supplied to keep the large top growing or will the top be cut back enough to establish the balance? Are the roads good enough to bear the weight? Is there room underneath bridges, wires, and other things to move a tree? Are the trucks of proper construction and strength to carry the tree safely? Can the tree be anchored until re-established? We have the knowledge to answer these questions.

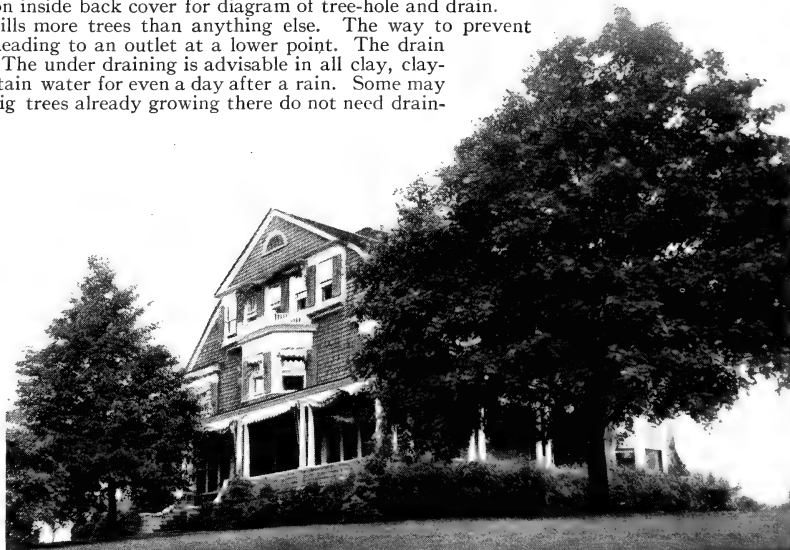
local coöperation we may expect in the way of men and teams, to dig the holes and fill in the holes from which the trees were taken.

Root-pruning wild trees before moving them is of advantage with only a few species. The main thing is to move them with a wide spread of roots, cut back sufficiently and plant them in suitable soil that is kept neither too wet nor too dry. See picture on inside back cover for diagram of tree-hole and drain.

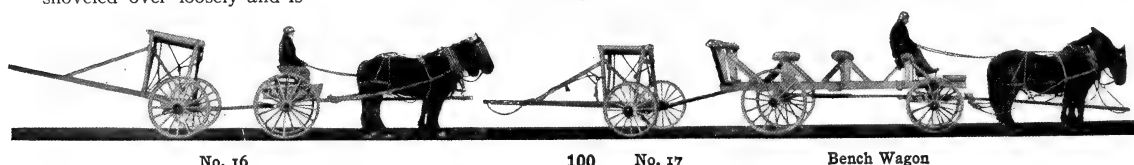
We find too much water kills more trees than anything else. The way to prevent loss is to put in a tile drain leading to an outlet at a lower point. The drain may be covered with gravel. The under draining is advisable in all clay, clay-loam or other soils liable to retain water for even a day after a rain. Some may object, and may say that the big trees already growing there do not need drainage and do not die even if the water does stand around the roots for several days during a flood.

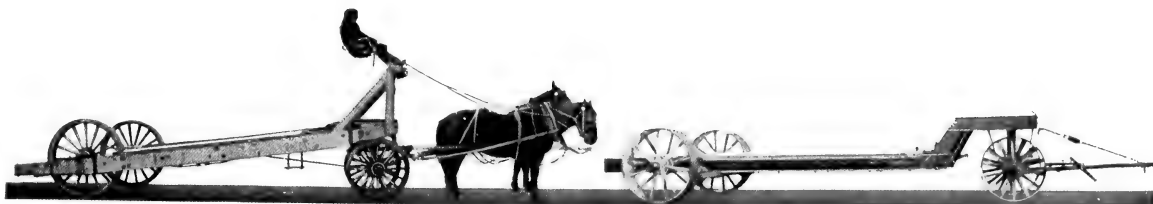
The reason that a tree that has not been moved does not have the roots rot when a pool of water stands around it for a few days, is because the soil is not disturbed and the water does not drive the air out of the soil. But let cattle or horses stand under the tree trampling the soil when wet; it may die. Or, let the water remain a long time, as when a swamp is at a higher level than usual; the roots will rot and kill the tree.

The conditions are different in a hole made for a newly planted tree. It is a basin 30 feet wide and 2 feet deep. The soil in it is shoveled over loosely and is



On the right, Norway Maple about 14 inches in diameter. On the left Linden, 8 inches in diameter, from our nurseries. These trees were photographed about four years after planting. Residence of Mr. R. R. Sizer, Plandome, L. I.





No. 13

TREE-MOVERS

No. 20



We brought to our nurseries 680 Cedars in four weeks with this outfit. Trees were mostly 20 to 30 feet high. The traction engine hauls as much as twenty-four to thirty horses, and does not get tired on a twelve hours' journey under full load. We grow such trees two to more years in our nurseries and keep them trimmed, cultivated, watered and fertilized. They are then in the best possible condition to plant. You can get good results, however, by moving them direct from the wild growth. We can send whatever apparatus will do the work most cheaply.

porous, and the spaces between the soil-particles become saturated with water, driving out the air. The roots then rot, and the ground sours. The bark of the roots becomes blue-black and blackish color, rather than a chocolate-brown, and smells sour. Even where the soil may become sour this way from the mere fact that 3 feet of loam ant thing is to know that the soil is right at the beginning and to

smells sour. The soil is also a the drainage is naturally good, holds moisture. The import-keep it right and not too wet.



Church of the Advent, Westbury. The two trees are large Pines planted one year before they were photographed. We have moved a number of large white Pines of similar size, and after several years they are all growing



No. 11

No. 4

101

No. 18



TREE-MOVERS

During the summer the tree needs water. Soil will appear wet at the surface, and yet down where the roots are working it will be dry and dusty. Do not be afraid to dig down and know what the conditions are. Do it in May and June, before the tree gets thirsty—not in September after the damage is done.

There is a proper amount of moisture and air in the soil conducive to healthy growth. You have to get it before you can get a profitable growth of corn or potatoes. Keep the soil in this condition around your trees and the resulting growth will be beautiful. Not one person in five who has ornamental trees planted, observes this simple requirement.

We cannot put into exact rules the care for large trees. The requirements mentioned above can be carried out by drainage (which is not always necessary), watering, mulching, manuring, cultivating or stirring the surface once in three weeks to make the dust mulch, and pruning. The moving of a large tree is a severe surgical shock. The convalescence is your part. It is amusing to hear persons say, "Oh, Hicks moved the tree, and we do not do anything to it," and note that the vegetable garden and the shrubbery are receiving proper attention.

Pruning or reducing the top is very important, especially on deciduous trees. We formerly thinned out the trees by cutting out one-half to three-quarters of the twigs. This left the tree so thin that it had to commence at the center and grow new sprouts on the larger limbs to thicken up. It would take two or three years by this process to thicken up again, especially as the men are prone to trim too much on the inside where it is easy to climb about. We now cut back the tree from 1 to 4 feet all around, and then thin out the balance. This results in dense growth all over the outside of the tree, and the tree more quickly recovers its normal density. When we bring large trees into our nurseries, we do not let the one pruning at the time of planting be the only one, but pruning is looked after for three or four years until it is in the desired shape and density.

Often the extreme top grows vigorously, but the lower side branches grow slowly. These vigorous shoots may be nipped in May and June, diverting the flow of sap to the lower limbs. This is the same principle used in making hedges dense and wide at the bottom.

If the tree is cut back to branches $1\frac{1}{2}$ inches in diameter there will be several shoots sprouting out. They will give the tree an unnatural appearance and should be reduced to one shoot.

If the tree grows slowly for the first one or two years, as a result of lack of food and water, or otherwise, it may be started into vigorous growth by cutting back 1 or 2 feet all around and giving it all it needs to eat and drink. By the second year the tree can take more, and there is little danger of overfeeding or overwatering.

Come to the nurseries, to look over our large trees; we will talk over these points, and you will get a clearer idea from the trees how to get the most rapid development of your landscape.

Pruning large evergreens that have been transplanted is not generally practiced. Evergreens can stand a more severe drought or proportionately severer lessening of roots when transplanted, because their small, needle-shaped leaves do not transpire as much as the broad, thin leaves of deciduous trees. German scientists have proved that the evergreens require one-tenth to one-fifth as much moisture for a given weight of trees as the broad-leaved trees.

We do prune the Cedars, but that is more to get a dense, symmetrical growth than to help the recovery from transplanting. The important thing with evergreens is to dig down into the ball of earth, where the roots are active, and take up a handful of soil and see if you can blow it as dust. It is often in this condition when the soil above and outside the ball appears damp. You will then acquire a sympathy with trees and give them what they want before they suffer. They will many times repay the expense of any attention.



A large part of our tree-moving with evergreens is with trees like this, from the nurseries, carrying two or three such trees with two teams. This is tree-mover No. 11. The windlass and seat can be taken off and a cradle put on for carrying deciduous trees 14 inches in diameter. All of the tree movers for moving deciduous trees can be arranged to be used for moving evergreens in this manner. Therefore you can have one truck shipped to your place and move both classes of trees; the work on evergreens continuing in May, July, August, December, January and February, when it is not suitable to work on deciduous trees.



TREES FOR LONG ISLAND



TREE-MOVERS



European Linden moved on Hicks tree-mover about five years before being photographed. The tree is within 300 feet of the bay at Cedarhurst, and has no foliage between it and the ocean. It leans away from the ocean winds, a characteristic of trees in such regions.



Large Pin Oak moved on Hicks tree-mover about six years before being photographed. These trees were brought in from the fields where they were growing wild, as described on pages 18 and 98

How to Plant and Care for a Tree

Size of the Hole. Dig the hole the full width of the roots. Do not bend them around. The tendency is to dig too deep. Dig deeper in the center for the central roots and keep the side roots from 4 to 12 inches below the surface.

Good Soil. If good soil is needed, dig 1 ½ to 2 feet deep and as much wider as you wish, and fill in with good soil before placing the tree.

Trimming. Cut back severely; you will get a bigger tree. A general rule is to cut the previous year's shoots to one to three buds and thin out the balance to one-half. With Oaks and Beeches, cut still closer, cutting off the branches ¾ to ½ inch in diameter, but leaving some big buds. With shrubs, take out the oldest branches and leave the young graceful shoots.

Planting. Set the tree in the hole the same depth as it was before. Shovel mellow earth around the center and pack it between the roots with a packing stick. Spread out the side roots, cover with earth and trample.

Watering. Water helps to work the soil between the roots. Watering is not necessary, however, in autumn and early spring, as there are always rains enough. In the late spring, watering is very advantageous, especially if the buds are starting.

Manure. "Should manure be put in the hole?" is often asked. Not unless it is rotted. Mix it with the soil. Fresh manure near the roots may rot them. The best way is to put the manure on the top. Nature keeps a layer of decaying leaves 4 inches deep the year round. Do the same with manure. If the manure is unsightly, cover it with soil.

Commercial fertilizer, bone-meal, wood-ashes and nitrate of soda are useful, and small quantities may be applied once a year or oftener.

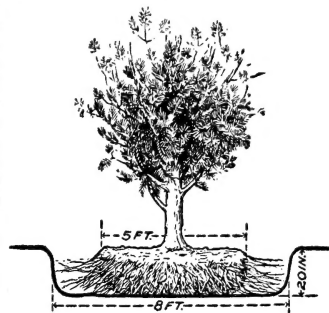
Care During Summer. Keep the surface cultivated 3 inches deep once in two weeks, the same as a cornfield. Eighty per cent of the planters fail to get the best results because they neglect this point. They deceive themselves. They keep a little circle, perhaps half the width of the roots, scraped bare of weeds and grass, but the ground is hard, and not hoed 3 inches deep and loose. The hard ground allows the moisture to dry out. The closely shaven lawn does the same.

If the trees fail to start full growth by June, they can be cut back more severely, but first examine the soil and see that it is damp and mellow.

Summer Watering should be looked after once in two weeks. If needed, give at least 1 inch of water. Next day, stir the earth 3 inches deep, to prevent it from baking and drying out again.

See large Tree Department, page 102, for further discussion.

Heeling in. This means to plant temporarily. Pack the earth between the roots and, if they are to stay several days and the soil is dry, give plenty of water.



Planting an evergreen or other tree with a ball of earth

Approximate Sizes of Holes

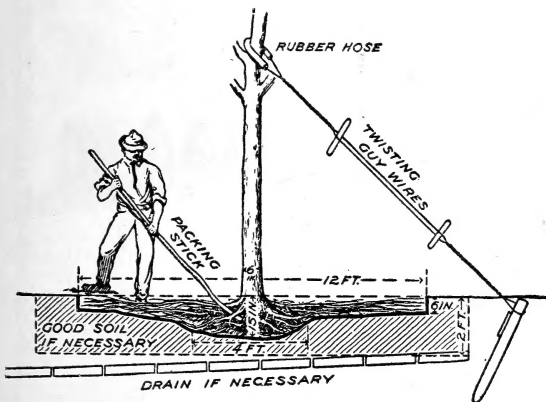
DECIDUOUS TREES

Diam. of trunk	Spread of branches	Spread of roots	Diam. of hole	Depth of center of hole	Depth at side
2 in.	5 ft.	5 ft.	5 ft.	12 in.	6 in.
4 in.	8 ft.	8 ft.	8 ft.	15 in.	6 in.
6 in.	12 ft.	12 ft.	12 ft.	15 in.	6 in.
8 in.	16 ft.	16 ft.	16 ft.	15 in.	6 in.
10 in.	22 ft.	22 ft.	22 ft.	18 in.	6 in.
14 in.	30 ft.	30 ft.	30 ft.	18 in.	6 in.
18 in.	35 ft.	35 ft.	35 ft.	20 in.	8 in.
22 in.	40 ft.	35 ft.	35 ft.	20 in.	8 in.

EVERGREENS

Height of tree	Spread of branches	Diam. of ball	Diam. of hole	Depth of center of hole
5 ft.	2 ft.	1 ½ ft.	3 ft.	15 in.
8 ft.	5 ft.	3 ft.	3-5 ft.	18 in.
10 ft.	6 ft.	3-4 ½ ft.	4-6 ft.	20 in.
14 ft.	8 ft.	4-5 ft.	5 ½-8 ft.	20 in.
18 ft.	10 ft.	4 ½-6 ft.	6-10 ft.	20 in.
22 ft.	12 ft.	5-7 ft.	7-11 ft.	20 in.

Cedars require holes of the narrowest diameter



Planting a deciduous tree 6 inches in diameter. How to prepare the hole, pack the earth, and anchor the tree

Certificate of Inspection of Nursery Stock

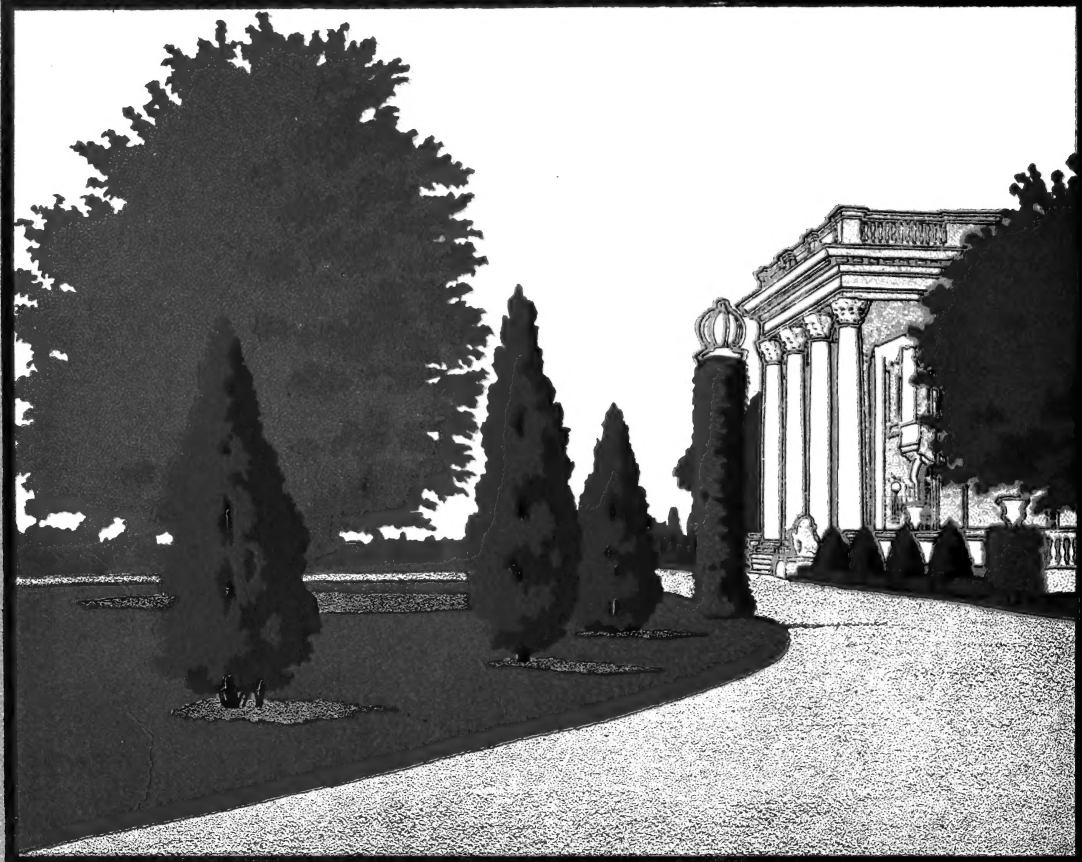
This is to certify, that the stock in the nursery of Isaac Hicks & Son, Westbury, County of Nassau, State of New York, was duly examined in compliance with the provisions of section 305 of the Agricultural Law, and was found to be apparently free from any contagious or infectious disease or diseases, or the San José Scale or other dangerously injurious insect pest or pests. This certificate expires September 1, 1912.

R. A. PEARSON,

Dated, Albany, N. Y., September 19, 1911,

Commissioner of Agriculture.

TREES FOR LONG ISLAND



HICKS NURSERIES
ISAAC HICKS AND SON
Westbury, Nassau Co., N.Y.